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# REPORT

ON

# ADULTERATION OF FOOD

BEING

## SUPPLEMENT No. III

TO THE REPORT

OF THE

## DEPARTMENT OF INLAND REVENUE

## 1882.

Printed by Order of Parliament.

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# REPORT

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# ADULTERATION OF FOOD

## ACTING COMMISSIONER'S REPORT

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## INSPECTION OF FOOD.

To the Honorable JOHN COSTIGAN,
Minister of Inland Revenue.

SIR,—I have the honor to submit my Report respecting the analysis of Food, together with Reports of the Analysts appointed under the Act, and tabulated statements prepared in this Department of the analyses of the various samples submitted to them.

Appointments.

1. By order in Council of 9th February, 1882, Dr. M. Fiset was appointed a Public Analyst for the city of Quebec, vacated by the death of Dr. LaRue on the 26th September, 1881.

Mr. R. G. Fraser, Public Analyst for Halifax, died on 14th March, 1882, and by Order in Council of the 29th March, Mr. Maynard Bowman was appointed to fill the vacancy.

Mr. Wm. Saunders was appointed by Order in Council of May 1st, 1882, a Public Analyst for the city of London.

Summary of results of Analyses.

2. The following statement is a summary of the whole number of samples analysed by the Dominion Analysts.

| Name of Sample. | Genuine. | Adulterated. | Doubtful. | Total. |
|---|---|---|---|---|
| Baking Powder | 17 | | | 17 |
| Bread | 81 | 1 | 1 | 83 |
| Butter | 141 | 48 | 8 | 197 |
| Canned Fruit | 24 | 2 | | 26 |
| Chocolate | 54 | | | 54 |
| Cocoa | 43 | 10 | | 53 |
| Coffee | 22 | 47 | | 69 |
| Flour | 18 | | | 18 |
| Ginger | 7 | 16 | | 23 |
| Milk | 130 | 59 | 13 | 202 |
| Pepper | 14 | 28 | 1 | 43 |
| Potted Meats and Fish | 20 | 3 | | 23 |
| Spices | 34 | 32 | | 66 |
| Sugar | 65 | | | 65 |
| Sweets | 61 | 5 | | 66 |
| Tea | 63 | 23 | 2 | 88 |
| Water | 15 | 14 | | 29 |
| Total | 809 | 288 | 25 | 1,122 |

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Proportion of samples adulterated.

3. From the above table it will be seen that out of eleven hundred and twenty-two samples analysed, two hundred and eighty-eight or a little over twenty-five per cent. were adulterated, and twenty-five returned as doubtful.

Percentage of adulteration.

4. The following table shows the percentage of adulteration for the past seven years:—

| Year. | Genuine. | Adulterated. | Doubtful. | Total Number Analysed. | Percentage of Adulteration. |
|---|---|---|---|---|---|
| 1876..... | 87 | 93 | ..... | 180 | 51·66 |
| 1877..... | 241 | 247 | ..... | 488 | 50·61 |
| 1878..... | 523 | 271 | 19 | 813 | 33·33 |
| 1879..... | 619 | 235 | 42 | 896 | 26·22 |
| 1880..... | 728 | 295 | 20 | 1,043 | 28·28 |
| 1881..... | 743 | 260 | 38 | 1,041 | 25·97 |
| 1882..... | 809 | 288 | 25 | 1,122 | 25·66 |

Bread stuffs.

5. Baking powder, bread and flour all appear to be of good quality. Only one sample of bread out of eighty-three analysed was found to be adulterated, and one returned as doubtful.

Butter.

6. Of one hundred and ninety-seven samples of butter analysed, forty-eight were found to be adulterated, and eight were returned as doubtful, the principal adulteration being by admixture of salt and water.

Canned fruit and vegetables.

7. Out of twenty-six samples of canned fruit, but two are returned as adulterated, while several are reported to contain traces of iron and tin.

Although many samples of canned fruits and meats have been found to contain traces of tin and iron they have not been classed as adulterated, though in some cases they are more dangerous to the public than if they were so.

The length of time during which they have been packed will, in all probability, indicate to some extent the degree of danger run by their use, as the solder and tin are ac ed upon by the contents.

Manufacturers would consult best their own interests if they caused the packages to be stamped with the year when they were filled and sent out. Buyers could then purchase with some security, avoiding the risk of being taken in by goods packed for several years and re-labelled in order to pass them off.

Such goods can only be used at the risk of public health.

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Condiments.

8. Of one hundred and thirty-two samples of condiments analysed, seventy-six or fifty-seven per cent. were found to be adulterated.

The adulteration of this class of food appears to be on the increase, as the following table will show:—

Percentage of adulteration.

| Year. | Genuine. | Adulterated. | Doubtful. | Total Number Analysed. | Percentage of Adulteration. |
|---|---|---|---|---|---|
| 1876 | 5 | 39 | ..... | 44 | 88·63 |
| 1877 | 24 | 83 | ..... | 107 | 77·57 |
| 1878 | 26 | 108 | ..... | 134 | 80·59 |
| 1879 | 51 | 64 | 2 | 117 | 54·70 |
| 1880 | 66 | 74 | ..... | 140 | 52·85 |
| 1881 | 53 | 73 | ..... | 126 | 50·79 |
| 1882 | 55 | 76 | 1 | 132 | 57·57 |

Cocoa and chocolate.

9. Fifty-three samples of cocoa were analysed, ten samples were returned as adulterated, of which six were found to be chocolate rather than cocoa. The chocolates were all found to be pure.

Coffee.

10. Sixty-nine samples of coffee were analysed, of which forty-seven were adulterated. Of eighteen samples analysed in Montreal, none were found to be pure, while Dr. Ellis of Toronto reports but three pure out of eighteen analysed.

Milk.

11. Out of two hundred and two samples of milk analysed, fifty-nine are reported as adulterated and thirteen returned as doubtful; showing an increase in adulteration over last year's work.

Potted meats and fish.

12. Twenty-three samples of potted meats were analysed, three were found to contain traces of tin and lead.

Sugar.

13. The sugars are reported as pure, although traces of glucose were present in some of the samples.

Sweets.

14. Sixty-six samples of sweets were analysed and only five were found to be adulterated, the adulterations being plaster of Paris and coloring matter.

Tea.

15. Of eighty-eight samples of tea analysed, twenty-three are returned as adulterated, the principal adulterations being foreign leaves and heavy facings.

Water.

16. Out of twenty-nine samples of water analysed, fourteen were classed as adulterated.

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The subject is fully treated in Appendix D, which will no doubt prove of interest to the public.

Respectfully submitted,

E. MIALL,

*Acting Commissioner.*

INLAND REVENUE DEPARTMENT,
OTTAWA, 20th November, 1882.

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## APPENDIX A.

# INSPECTION OF FOOD AND DRUGS.

## *REPORTS OF PUBLIC ANALYSTS.*

### 1.—TORONTO DIVISION.

To the Commissioner of Inland Revenue,
Ottawa, Canada.

TORONTO, 15th September, 1882.

SIR,—I have the honor to submit to you my Report for the past year.

I have analysed 303 samples of articles of food and drink, of which I find 61 adulterated and 242 pure. I appended a tabular statement of my results:— Number of Samples analysed.

| Description. | Number of Samples | Pure. | Adulterated. | Nature of Adulteration. |
|---|---|---|---|---|
| Allspice | 6 | 5 | 1 | |
| Bread | 22 | 22 | ..... | None. |
| Butter | 54 | 50 | 4 | Too much salt and water. |
| Canned Fruits | 8 | 8 | ..... | Tin and iron. |
| do Meats | 4 | 3 | 1 | None. |
| do Fish | 4 | 4 | ..... | do |
| Cinnamon | 4 | ..... | 4 | Cassia and peas. |
| Cloves | 9 | 3 | 6 | Flour, stalks and turmeric. |
| Cocoa and Chocolate | 28 | 28 | ..... | None. |
| Coffee | 18 | 3 | 15 | Chicory and flour. |
| Ginger | 5 | 3 | 2 | Flour. |
| Milk | 54 | 35 | 19 | Watered. |
| Pepper | 10 | 5 | 5 | Flour. |
| Sugar | 18 | 18 | ..... | None. |
| Sweets | 20 | 17 | 3 | Iron, pigments and gypsum. |
| Flour | 6 | 6 | ..... | None. |
| Tea | 20 | 20 | ..... | do |
| Baking powder | 6 | 6 | ..... | do |
| Water | 7 | 6 | 1 | |
| Total | 303 | 242 | 61 | |



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## Analysis of 54 Samples of Butter.

| Number. | Specific Gravity. | Fat. | Curd. | Salt. | Water. | Date. | Remarks. |
|---|---|---|---|---|---|---|---|
| p. c. | p. c. | p. c. | p. c | p. c. | p. c. | | |
| 4742 | 9123 | 83·1 | 1·5 | 2·4 | 13·0 | Oct. 13, 1881... | Unadulterated. |
| 4743 | 9137 | 80·2 | 1·5 | 9·3 | 9·0 | do ... | do |
| 4749 | 9112 | 72·8 | 3·5 | 6·7 | 17·0 | Oct. 24, 1881... | Too much salt and water. |
| 4750 | 9116 | 81·3 | 0 8 | 4·8 | 13·0 | do .... | Unadulterated. |
| 4757 | 9133 | 82·6 | 1·1 | 5·2 | 11·1 | Nov. 3, 1881 .... | do |
| 4758 | 9117 | 87·1 | 0·9 | 1·6 | 10·4 | do ... | do |
| 4759 | 9105 | 80·8 | 1·0 | 8·8 | 9·4 | do .... | do |
| 4760 | 9112 | 84·9 | 1·6 | 4·5 | 9·0 | do .. | do |
| 4763 | 9135 | 88·5 | 1·2 | 2·2 | 8·1 | Nov. 8, 1881.... | do |
| 4764 | 9133 | 80·7 | 1·1 | 9 0 | 9·2 | do .... | do |
| 4772 | 9126 | 81·1 | 1·3 | 7·3 | 10·3 | Nov. 19, 1881.. | do |
| 4773 | 9114 | 84·9 | 0·7 | 2·7 | 11·7 | do .. | do |
| 4774 | 9116 | 89·4 | 1·1 | 1 8 | 7·7 | do .. | do |
| 4777 | 9112 | 86·0 | 1·2 | 3·7 | 9·1 | Nov. 23, 1881.. | do |
| 4778 | 9113 | 88·3 | 1·2 | 1·5 | 9·0 | do .. | do |
| 4779 | 9134 | 81·8 | 1·2 | 5·6 | 11·4 | do .. | do |
| 4790 | 9124 | 78·0 | 1·0 | 7·2 | 13·8 | Dec 2. 1881... | Too much salt and water. |
| 4791 | 9116 | 84·2 | 1·3 | 2·7 | 11·8 | do ... | Unadulterated. |
| 5102 | 9117 | 84·0 | 1·1 | 2·2 | 12·7 | Dec. 9, 1881.... | do |
| 5103 | 9111 | 85·0 | 1·1 | 3·4 | 10·5 | do .... | do |
| 5106 | 9122 | 84 8 | 1·0 | 2·9 | 11·3 | Dec. 15, 1881... | do |
| 5107 | 9150 | 85·2 | 1·7 | 2·9 | 10·2 | do .. | do |
| 5112 | 9126 | 86·1 | 0·8 | 2·5 | 10·6 | Dec. 23, 1881... | do |
| 5113 | 9116 | 72·8 | 1·4 | 15·1 | 10·7 | do .... | Too much salt and water. |
| 5114 | 9126 | 85·7 | 1·2 | 3·7 | 9·4 | do .... | Unadulterated. |
| 5115 | 9131 | 85·7 | 0·9 | 3·5 | 9 9 | do ... | do |
| 5120 | 9117 | 82·6 | 0 8 | 6·9 | 9·7 | Dec. 29, 1881 .. | co |
| 5121 | 9102 | 79·2 | 1·7 | 6 2 | 12·9 | do .... | co |
| 5122 | 9121 | 86·3 | 0 8 | 3·0 | 9·9 | do ... | do |
| 5123 | 9130 | 87·9 | 1·2 | 2·1 | 8·8 | do ... | do |
| 5191 | 9130 | 80·4 | 1·0 | 7·3 | 11·3 | March 20, 1882 | do |
| 5192 | 9109 | 82·7 | 1·1 | 4·6 | 11·6 | do | do |
| 5197 | 9138 | 87·1 | 1·0 | 2·3 | 9·6 | March 30, 1882 | do |
| 5198 | 9129 | 75·1 | 0·9 | 9 3 | 14·7 | do | Too much salt and water. |
| 5403 | 9120 | 88·2 | 1·0 | 2·9 | 7·9 | April 3, 1882... | Unadulterated. |
| 5404 | 9131 | 85·2 | 1·5 | 5·7 | 7·6 | do .... | do |
| 5407 | 9123 | 87·2 | 1·9 | 2·8 | 9·1 | April 11, 1882.. | do |
| 5408 | 9109 | 81·5 | 1·6 | 3 8 | 13·0 | do .. | do |
| 5411 | 9111 | 80·0 | 1·1 | 8·2 | 10·7 | April 19, 1882.. | do |
| 5412 | 9118 | 84·2 | 1·8 | 4·5 | 9·5 | do .. | do |
| 5433 | 9111 | 88·7 | 2·0 | 1·9 | 7.4 | April 28, 1882.. | do |
| 5434 | 9121 | 84·7 | 0·7 | 3·5 | 11·1 | do .. | do |
| 5448 | 9120 | 85·0 | 0·7 | 5·3 | 9·0 | May 4, 1882..... | do |
| 5449 | 9126 | 80·0 | 1·7 | 5·3 | 13·0 | do ..... | do |
| 5450 | 9128 | 83·5 | 0·8 | 3·0 | 12·7 | do ..... | do |
| 5454 | 9129 | 88·2 | 1·9 | 1·6 | 9·2 | May 12, 1882... | do |
| 5455 | 9102 | 83·3 | 1·5 | 7·0 | 8·2 | do ... | do |
| 5456 | 9114 | 80·4 | 1·3 | 3·2 | 15·1 | do ... | do |
| 5459 | 9123 | 84·8 | 1·5 | 2·4 | 11·3 | May 23, 1882.... | do |
| 5460 | 9131 | 80·5 | 1·5 | 4·4 | 13·6 | do ... | do |
| 5461 | 9155 | 85·3 | 1·6 | 1·6 | 11·5 | do .... | do |
| 5481 | 9112 | 87·0 | 0·7 | 3·6 | 8·7 | June 1, 1882... | do |
| 5482 | 9130 | 80·9 | 1·2 | 2 3 | 15·6 | do .... | do |
| 5943 | 9142 | 83·1 | 1·4 | 3·8 | 11·7 | June 24, 1882. | do |

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## Analysis of 54 Samples of Milk.

| Number. | Specific Gravity | Solids | Fat. | Solids not Fat. | Ash. | Date. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | p. c. | p. c. | p. c. | p. c. | | |
| 4740 | 1025 | 9·7 | 2·6 | 7·1 | ·6 | Oct. 13, 1881. ... | Watered. |
| 4741 | 1031 | 12·4 | 3·4 | 9·0 | ·7 | do ..... | Unadulterated. |
| 4747 | 1024 | 10·6 | 3·2 | 7·4 | ·6 | Oct. 24, 1881. ... | Watered. |
| 4748 | 1030 | 12·2 | 3·5 | 8·8 | ·7 | do ..... | Doubtful. |
| 4751 | 1029 | 11·3 | 3·1 | 8·2 | ·7 | Nov. 3, 1881..... | Watered. |
| 4752 | 1026 | 11·2 | 3·4 | 7·8 | ·6 | do ..... | do |
| 4753 | 1023 | 9·7 | 2·9 | 6·8 | ·5 | do ..... | do |
| 4754 | 1026 | 10·4 | 3·0 | 7·4 | ·6 | do ..... | do |
| 4755 | 1032 | 13·2 | 4·0 | 9·2 | ·7 | do ..... | Unadulterated. |
| 4756 | 1046 | 11·2 | 3·4 | 7·8 | ·6 | do ..... | Watered. |
| 4761 | 1021 | 10·0 | 3·5 | 6·5 | ·5 | Nov. 8, 1881..... | do |
| 4762 | 1030 | 12·1 | 3·1 | 9·0 | ·7 | do ..... | Unadulterated. |
| 4770 | 1030 | 11·6 | 3·2 | 8·4 | ·7 | Nov. 19, 1881. ... | Doubtful. |
| 4771 | 1020 | 8·3 | 2·3 | 6·0 | ·5 | do ..... | Watered. |
| 4775 | 1030 | 12·6 | 3·4 | 9·2 | ·7 | Nov. 23, 1881. ... | Unadulterated. |
| 4776 | 1031 | 12·3 | 3·3 | 9·0 | ·7 | do ..... | do |
| 4788 | 1024 | 9·6 | 2·7 | 6·9 | ·6 | Dec. 2, 1881..... | Watered. |
| 4789 | 1026 | 10·8 | 3·1 | 7·7 | ·6 | do .... . | do |
| 4800 | 1033 | 13·0 | 3·1 | 9·9 | ·8 | Dec. 9, 1881..... | Unadulterated. |
| 5101 | 1023 | 10·1 | 3·0 | 7·1 | ·6 | do ..... | Watered. |
| 5104 | 1031 | 13·8 | 4·5 | 9·3 | ·7 | Dec. 15, 1881..... | Unadulterated. |
| 5105 | 1031 | 13·5 | 4·0 | 9·5 | ·8 | do ..... | do |
| 5108 | 1030 | 12·5 | 3·3 | 9·2 | ·7 | Dec. 23, 1881. ... | do |
| 5109 | 1026 | 10·1 | 2·4 | 7·7 | ·6 | do ..... | Watered. |
| 5110 | 1031 | 13·4 | 4·0 | 9·4 | ·7 | do ..... | Unadulterated. |
| 5111 | 1028 | 16·7 | 7·5 | 9·2 | ·7 | do ..... | do (fat a remarkable cr.=28). |
| 5116 | 1033 | 12·5 | 2·9 | 9·6 | ·7 | Dec. 29, 1881. ... | Unadulterated. |
| 5117 | 1033 | 12·9 | 3·1 | 9·8 | ·8 | do ..... | do |
| 5118 | 1027 | 11·8 | 3·3 | 8·5 | ·6 | do ..... | Watered. |
| 5119 | 1031 | 12·7 | 3·3 | 9·4 | ·7 | do ..... | Unadulterated. |
| 5189 | 1031 | 12·5 | 3·7 | 8·8 | ·7 | March 20, 1882... | do |
| 5190 | 1026 | 9·9 | 2·5 | 7·4 | ·6 | do ... | Watered. |
| 5195 | 1028 | 11·2 | 3·0 | 8·2 | ·7 | March 30, 1882... | do |
| 5196 | 1034 | 11·5 | 2·3 | 9·2 | ·7 | do ... | Unadulterated. |
| 5401 | 1030 | 11·3 | 2·9 | 8·4 | ·7 | April 3, 1882. ... | Watered. |
| 5402 | 1031 | 12·3 | 3·0 | 9·3 | ·8 | do ..... | Unadulterated. |
| 5405 | 1031 | 13·0 | 3·6 | 9·4 | ·7 | April 11, 1882.... | do |
| 5406 | 1033 | 13·3 | 3·1 | 10·2 | ·8 | do .... | do |
| 5409 | 1031 | 12·0 | 2·5 | 9·5 | ·7 | April 19, 1883.... | do |
| 5410 | 1030 | 12·4 | 3·3 | 9·1 | ·6 | do .... | do |
| 5431 | 1027 | 11·0 | 2·7 | 8·3 | ·6 | April 28, 1882.... | Watered. |
| 5432 | 1028 | 10·3 | 2·0 | 8·3 | ·6 | do .... | Unadulterated. |
| 5435 | 1021 | 13·6 | 6·6 | 7·0 | ·5 | May 4, 1882..... | Cream (cr. 28 p. c.). |
| 5446 | 1028 | 10·5 | 1·0 | 9·5 | ·5 | do ..... | Unadulterated. |
| 5447 | 1027 | 12·2 | 1·3 | 10·9 | ·7 | do ..... | do |
| 5451 | 1031 | 12·1 | 2·3 | 9·8 | ·7 | May 12, 1882..... | do |
| 5452 | 1032 | 12·6 | 2·3 | 10·3 | ·7 | do ..... | do |
| 5453 | 1031 | 12·2 | 2·7 | 9·5 | ·7 | do ..... | do |
| 5457 | 1031 | 12·7 | 3·1 | 9·6 | ·7 | May 23, 1882 ..... | do |
| 5458 | 1031 | 12·6 | 2·9 | 9·7 | ·7 | do ..... | do |
| 5478 | 1031 | 12·0 | 3·3 | 8·7 | ·8 | June 1, 1882..... | do |
| 5479 | 1030 | 12·1 | 2·8 | 9·3 | ·7 | do ..... | do |
| 5480 | 1025 | 9·4 | 2·3 | 7·1 | ·6 | do ..... | Watered. |
| 5942 | 1030 | 11·5 | 2·7 | 8·8 | ·6 | June 26, 1882. ... | Poor. |



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## Analysis of 27 Samples of Cocoa and Chocolate.

| No. | Name. | Cocoa. | Sugar. | Starch. | Nature of Starch added. |
|---|---|---|---|---|---|
| | | p. c. | p. c. | p. c. | |
| 4780 | ..... | 100 | ..... | ..... | |
| 4781 | Todhunter's Santé..... | 45 | 50 | 5 | Flour. |
| 4782 | Cadbury's London Chocolate ..... | 40 | 55 | 5 | Arrowroot. |
| 4783 | Todhunter's Chocolate..... | 50 | 50 | ..... | |
| 4784 | Taylor Bros. Soluble..... | 55 | 45 | ..... | Part of fat removed. |
| 4785 | Cadbury's Mexican..... | 50 | 50 | ..... | |
| 4786 | Todhunter's Chocolate..... | 50 | 25 | 25 | Corn starch & arrowroot. |
| 4787 | Taylor Bros. Soluble..... | 55 | 45 | ..... | Part of fat removed. |
| 4792 | Black's Iceland Moss..... | 30 | 45 | 25 | Corn starch and Iceland moss. |
| 4793 | Vandecarr's Cocoa ..... | 20 | 50 | 30 | Corn starch. |
| 4794 | Todhunter's do ..... | 40 | 35 | 25 | Corn starch & arrowroot. |
| 4795 | do do ..... | 40 | 35 | 25 | do |
| 4796 | Epp's Homœopathic ..... | 50 | 25 | 25 | Arrowroot. |
| 4797 | Black's Iceland Moss..... | 30 | 45 | 25 | Corn starch and Iceland moss. |
| 4798 | Cadbury's Cocoa Essence.. | 100 | ..... | ..... | From which two-thirds fat removed. |
| 5415 | Taylor Bros. Soluble..... | 60 | 40 | ..... | Part of fat removed. |
| 5416 | Todhunter's Fine French... | 50 | 50 | ..... | |
| 5417 | do Santé..... | 50 | 50 | ..... | |
| 5418 | Black's Fine Mexican..... | 66 | 34 | ..... | |
| 5419 | Todhunter's Chocolate..... | 55 | 45 | ..... | |
| 5420 | do do ..... | 50 | 50 | ..... | |
| 5421 | Epp's Homœopathic ..... | 50 | 25 | 25 | Arrowroot. |
| 5422 | Todhunter's Cocoa ..... | 40 | 25 | 35 | Corn starch. |
| 5423 | Todhunter, Mitchell & Co. | 40 | 30 | 30 | do |
| 5424 | do do ... | 40 | 30 | 30 | do & arrowroot. |
| 5425 | Russell & Co..... | 40 | 30 | 30 | do |
| 5426 | Todhunter & Co..... | 40 | 30 | 30 | do |

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## Analysis of 18 Samples of Sugar.

| Number. | Cane Sugar. | Glucose. | Moisture. | Ash. | Date. | Name. |
|---|---|---|---|---|---|---|
| 5152 | 89·3 | 8·3 | 1·4 | 1·0 | Dec. 22, 1881 | Yellow. |
| 5153 | 88·4 | 8·5 | 1·9 | 1·2 | do ... | do |
| 5154 | 93·7 | 5·2 | 0·8 | 0·3 | do ... | Light yellow. |
| 5155 | 99·9 | ..... | 0·02 | 0·08 | do ... | White crystallized. |
| 5156 | 100·0 | ..... | ..... | ..... | do ... | do |
| 5157 | 88·8 | 8·0 | 1·9 | 1·3 | do ... | Yellow. |
| 5158 | 91·8 | 6·0 | 1·1 | 1·1 | do ... | Light yellow. |
| 5159 | 99·9 | ..... | 0·1 | 0·05 | do ... | White crystallized. |
| 5160 | 99·9 | ..... | 0·05 | 0·05 | do ... | do |
| 5161 | 97·9 | 1·5 | 0·4 | 0·2 | do ... | Light yellow. |
| 5483 | 95·8 | 3·2 | 0·8 | 0·2 | May 29, 1882 | do |
| 5484 | 99·95 | ..... | 0·05 | ..... | do ... | White crystallized. |
| 5485 | 93·5 | 4·0 | 2·3 | 0·2 | June 8, 1882 | Yellow. |
| 5486 | 99·9 | ..... | 0·1 | ..... | do ... | White crystallized. |
| 5487 | 99·95 | ..... | 0·05 | ..... | do ... | do |
| 5488 | 99·9 | ..... | 0·1 | ..... | do ... | do |
| 5489 | 90·6 | 6 5 | 2·3 | 0·6 | do ... | Yellow. |
| 5490 | 93·2 | 4·4 | 2·1 | 0·3 | do ... | do |

## Analysis of 20 Samples of Tea.

| Number. | Ash. | Soluble Ash. | Extract. | Extract Ash. | Silica. | Theine. | Date. | Kind. |
|---|---|---|---|---|---|---|---|---|
| 5142 | 6·38 | 3·61 | 39·8 | 5·0 | 0·49 | 2·2 | Dec. 15, 1881 | Green. |
| 5143 | 5·99 | 3·69 | 43·4 | 4·1 | 0·22 | 2·4 | do ... | Y. Hyson. |
| 5144 | 6·08 | 3·58 | 43·4 | 4·2 | 0·4 | 2·25 | do ... | Green. |
| 5145 | 6·01 | 3·59 | 45·2 | 3·6 | 0·3 | 2·0 | do ... | do |
| 5146 | 5·86 | 3·46 | 37·6 | 4·2 | 0·2 | 1·9 | do ... | Black. |
| 5147 | 6·11 | 3·8 | 38·0 | 4·3 | 0·25 | 2·5 | do ... | Green. |
| 5148 | 5·88 | 3·27 | 39·2 | 3·0 | 0·47 | 2·6 | Dec. 16, 1881 | do |
| 5149 | 6·12 | 3·5 | 45·2 | 5·2 | 0·46 | 2·3 | do ... | do |
| 5150 | 6·0 | 3·4 | 37·2 | 4·6 | 0·6 | 2·25 | do ... | Black. |
| 5151 | 5·9 | 3·4 | 40·2 | 4·0 | 0·3 | 1·9 | do ... | Y. Hyson. |
| 5436 | 6·4 | 3·9 | 41·2 | 6·1 | 0·5 | 1·95 | Apr. 10, 1882 | do |
| 5437 | 6·0 | 3·6 | 39·4 | 3·8 | 0·7 | 1·3 | do ... | do |
| 5438 | 5·5 | 3·7 | 37·9 | 4·1 | 0·9 | 2·25 | do ... | Uncoloured Japan. |
| 5439 | 6·2 | 3·6 | 38·6 | 4·6 | 0·25 | 1·85 | do ... | Y. Hyson. |
| 5440 | 6·5 | 3·5 | 31·0 | 2·6 | 0·7 | 2·25 | do ... | Black. |
| 5441 | 6·2 | 3·6 | 45·8 | 4·6 | 0·5 | 2·35 | do ... | Y. Hyson. |
| 5442 | 6·0 | 3·6 | 38·5 | 3·7 | 0·4 | 2·30 | do ... | do |
| 5443 | 6·5 | 3·1 | 35·2 | 4·3 | 0·99 | 2·45 | do ... | Gunpowder. |
| 5444 | 6·58 | 3·7 | 37·4 | 5·0 | 0·34 | 1·75 | do ... | Y. Hyson. |
| 5445 | 6·5 | 3·8 | 41·3 | 4·7 | 0·44 | 1·85 | do ... | do |

### *Bread.*

The bread was all of good quality and unadulterated.

Bread.

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*Butter.*

Butter. The only adulterations have been too much salt and water; of 54 samples, four were adulterated in this respect.

I have found no case of admixture with foreign fats.

I append a table of results.

*Canned Meats—Fish and Fruit.*

Canned Meats, Fish and Fruit. The canned meats were all good except one sample of "preserved chicken," which contained a considerable quantity of tin and iron.

The canned fish were all good.

The canned fruits all contained tin.

*Spices.*

Spices. Of 28 samples, 14 were adulterated. The adulterations consisted chiefly of farinaceous matter.

*Sugar.*

Sugar. I append table of results.

*Sweets.*

Sweets. 20 samples analysed; one contained 7 per cent. of gypsum. None contained any injurious coloring matter, except two which contained a small quantity of iron pigment.

*Teas.*

Teas. I append table of results.

*Baking Powders.*

Baking Powders. Those examined consisted of tartaric acid, or bitartarate of potash, or acid phosphate of lime mixed with carbonate of soda. Some contained alum.

Three teaspoonsfuls of the powders examined yielded the following quantities of carbon dioxide respectively:—

| Powders. | Carbon Dioxide. |
|---|---|
| Cook's Friend | 42 cubic inches. |
| Bon Ton | 37 " |
| Pure Gold | 61 " |
| Standard | 12 " |
| Ontario | 28 " |
| Cook's Own | 35 " |

*Milks.*

Milks. 54 sample were examined; 19 were watered, two samples were cream.

*Cocoa and Chocolate.*

Cocoa and Chocolate. Presented no unusual features.

I have the honor to be, Sir,

Your obedient servant,

W. HODGSON ELLIS.

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## MONTREAL DIVISION.

OFFICE OF PUBLIC ANALYST,
MONTREAL, Oct. 11, 1882.

To the Commissioner of Inland Revenue,
Ottawa.

SIR,—I have the honor to submit to you my Annual Report on Food Analysis for the year ending July 1st, 1882. I have received, since last Report, 324 samples for analysis, viz.: Number of Samples analysed.

| | |
|---|---|
| From the Collector at Montreal | 298 |
| From the Collector at Cornwall | 22 |
| From the Collector at Sherbrooke | 3 |
| From the Department at Ottawa | 1 |
| Total | 324 |

Of these I have returned 210 as genuine,
101 as adulterated,
13 as of doubtful or inferior quality.

Total..... 324

These results I have tabulated as follows :—

| Nature of Sample. | Number. | Genuine. | Adulterated. | Of Doubtful or Inferior Quality. | Total. | Remarks. |
|---|---|---|---|---|---|---|
| Baking Powder | 6 | 6 | ..... | ..... | 6 | |
| Bread | 25 | 24 | 1 | ..... | 25 | |
| Butter | 54 | 32 | 15 | 7 | 54 | |
| Canned Fruits and Vegetables | 9 | 9 | ..... | ..... | 9 | |
| Chocolate | 14 | 14 | ..... | ..... | 14 | |
| Cocoa | 14 | 13 | 1 | ..... | 14 | |
| Coffee | 18 | ..... | 18 | ..... | 18 | No genuine coffee. |
| Flour | 6 | 6 | ..... | ..... | 6 | |
| Milk | 54 | 36 | 13 | 5 | 54 | |
| Pepper | 12 | 2 | 9 | 1 | 12 | |
| Potted Meats and Fish | 8 | 7 | 1 | ..... | 8 | |
| Spices | 24 | 5 | 19 | ..... | 24 | |
| Sugar | 18 | 18 | ..... | ..... | 18 | |
| Sweets | 20 | 20 | ..... | ..... | 20 | |
| Tea | 20 | 9 | 11 | ..... | 20 | |
| Water | 22 | 9 | 13 | ..... | 22 | 13 unfit for food. |
| | 324 | 210 | 101 | 13 | 324 | |

### *Bread, &c.*

The staple foods, viz.: bread, flour and baking powder are found to be, as in previous years, in a satisfactory state of purity. The only exception in the case of bread, being found at Lennoxville, showing the desirability of extending the operation of the Act to the Eastern Townships. Bread, &c.

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### *Butter.*

Butter.

This is still an article frequently adulterated, and, when not intentionally sophisticated, is sold largely to the public, in a rancid and unwholesome condition. I have arrived at the same conclusion as my Toronto colleague, Dr. Ellis, that 80 per cent of butter fat is a fair standard for the minimum of genuine butter. Excess of salt or of water, so as to diminish this standard, is an evidence of fraud on the part of the maker, and a cause of the rapid deterioration which places many in the third column of rancid butter.

Sweet butterine is undoubtedly more wholesome than rancid butter, and in the public interest it would be more advisable to arrest the sale of rancid butter and encourage the manufacture of a superior class of butterine, under a License Act, which would guarantee the employment of wholesome ingredients only.

### *Beer.*

Beer.

Although no samples of malt liquor have been submitted by the Department, samples have been analyzed for the License Inspector of this Province, of a thin beer, called "malt beverage," containing 3½ per cent alcohol, equal to 7 per cent. of proof spirit, and supplied to the public on St. Helen's Island (a public park) as a "temperance beverage." Information was laid before the police magistrate, and a quantity of the beverage seized; a fine was imposed and the contractor was compelled to take out a liquor license, in order to cover the clause in the Quebec Act, providing against the sale of any liquor, "containing any intoxicating principle."

This confirms the decision of the presiding magistrate, reported in supplement No. 3, page 11, in 1878 report, viz., that the percentage of alcohol is no factor in determining the nature of an "intoxicating liquor;" if it contains any alcohol at all its sale requires a license under the Quebec Act.

### *Milk.*

Milk.

The proportion of adulterated samples of milk shows a further improvement, falling from one third to almost one fourth of the samples examined.

Several of the samples were taken at the suggestion and with the assistance of the City Sanitary Inspector Mr. I. C. Radford.

Some of these were supplied to public institutions in the city and were brought before the Recorder's Court under the city by-law.

Two milkmen and two retail grocers were convicted and fined by the Recorder. Two cases failed on technical points of evidence.

The publication of these cases doubtless had its influence in improving the general average quality of milk.

### *Tea, Coffee, Cocoa &c.*

Tea, Coffee, Cocoa, &c.

These show greater adulteration than in previous years and were taken chiefly from small retailers in the east part of the city in the French district.

More than one half of these teas were adulterated and heavily faced with mineral pigments. The coffees were all adulterated, and, with one exception, with worthless roasted cereals as well as with

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chicory. These coffees are all ground at the wholesale spice mills, and sold to the retail grocer at a less price than the value of raw berries.

In this case, therefore, the wholesale and retail dealers conspire to defraud the public, and stock the small dealers with worthless materials of food, sold under the name of "ground coffee."

### *Peppers and Spices.*

Peppers and Spices.

No improvement is apparent in the practice of adulteration in these articles which is acknowledged by the trade in every price list by the various grades of each pepper and spice and by the relation of the value of the ground spices to the same spices unground.

I would respectfully propose as a remedy to these general practices (the result of over competition and unscrupulous dealers) :—

1st. That spice grinders be required to take out licenses for their business under the Inland Revenue Act, under somewhat similar requirements as the compounders' spirit license;

2nd. That such premises be under the surveillance of officers of Inland Revenue who shall have power to seize and confiscate all material used for adulteration such as what is technically called :—

P. D. for black pepper
P. D. for white pepper
P. D. for ginger
P. D. for allspice, &c.

also gypsum and terra alba used for adulteration of cream of tartar and other white powders;

The supply of these sophistications has become an open and considerable trade in New York, and this practice of adulteration will be on the increase, unless the proper steps are taken for its prevention, detection and punishment, under the Inland Revenue Act of 1875.

3rd. That the provisions and penalties of the Adulteration of Food Act be enforced.

### *Sugars and Sweets.*

Sugars and Sweets.

These appear to be of fair quality, and generally free from metallic impurities.

### *Water.*

Water.

Probably of all the articles of food examined none are so really important to the public health as the public water supply. Of the various articles for sale as food or condiment the purchaser has some choice, and may exercise some discretion in the selection, but, in his supply of water, the citizen is either at the mercy of a public company, or dependent upon wells, or water carts, in either case he has no choice of supply, and must often suffer the penalty of sickness and death in his family, ere he discovers the source of his trouble. In the report for 1879, Supplement No. 3, page 77, samples of water purveyed by water cart (1438) is condemned as unfit for human consumption; (2017) public supply from City of Montreal contains ammonia and albumenoid, nitrogen in quantities prejudicial to health; (2040) turbid with fine clay requiring filtration. In the same year Prof. La Rue gives three samples well water, 1823, 1824, 1825, in citadel Quebec, containing an excessive quantity of organic matter viz: 18·05, 16·22 and 18·00, which must be considered

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abnormal and unhealthy proportion of organic matter, indicating surface drainage.

Also in the same report Mr. Fraser reports of (2379) bad water containing excess of ammonia and albumenoid, with such marked excess of chlorine as indicate contamination with sewerage.

Dr. Bergin has therefore done good service to his constituents at Cornwall, by moving the Department into a general inquiry into the state of the water supply of the important town of Cornwall. Cut off from direct approach to the St. Lawrence by its ample canal, Cornwall is dependent for its drinking water upon private wells. Of the 22 samples of water forwarded by Mr. Collector Mulhern, under the supervision of Dr. Bergin 13 samples prove unfit for consumption.

| | |
|---|---|
| Unfit for consumption | 13 |
| Water—3rd class | 2 |
| 2nd class | 4 |
| 1st class | 1 |
| | 20 |
| Exceptionally pure | 2 |
| | 22 |

The waters of exceptional purity, Nos. 11 and 21, although within reach of the whole community, were not made available.

This subject has been fully treated of in 3rd Supplement, part 2, 1881, which will be found in this report as "Appendix D." The method and valuations adopted are there detailed with the tabulated results, and a comparison with English water supplies, according to English standards.

Filtration, general or household, is a convenient remedy for many of the impurities in domestic water, but there are many instances of injurious constituents which cannot be removed by filtration, and these are condemned as "unfit for use."

I have the honor to be, Sir,

Your obedient servant,

J. BAKER EDWARDS, Ph. D., D.C.L., F.C.S.

*Public Analyst.*

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## QUEBEC DIVISION.

(*Translation.*)

QUEBEC, 27th June, 1882.

To the Commissioner
of Inland Revenue.

SIR,—I have the honor to submit my first Report of analyses of alimentary substances made from my appointment in February, 1882, to the 17th June, 1882. During those five months I examined 123 samples of bread, butter, sugar, milk, coffee, &c. Of these 79 were unadulterated, 4 doubtful, and 40 adulterated.

The number of cases of adulteration is considerable as compared with other years. This is possibly due to the fact that the samples examined by me came for the most part from establishments which are not recognized as being of the first class.

Number of Samples analysed.

### TABLE A.

| Description of Substance. | Pure. | Adulterated. | Doubtful. | Totals. |
|---|---|---|---|---|
| Bread | 11 | ..... | 1 | 12 |
| Butter | 13 | 11 | ..... | 24 |
| Milk | 19 | 4 | 1 | 24 |
| Cocoa | ..... | 6 | ..... | 6 |
| Pepper | 1 | 4 | ..... | 5 |
| Chocolate | 6 | ..... | ..... | 6 |
| Candy | 8 | ..... | ..... | 8 |
| Coffee | 3 | 3 | ..... | 6 |
| Spices | 6 | 4 | ..... | 10 |
| Ginger | ..... | 4 | ..... | 4 |
| Sugar | 8 | ..... | ..... | 8 |
| Tea | 6 | 2 | 2 | 10 |
| Total | 81 | 38 | 4 | 123 |

*Bread.*

Among the twelve samples of bread which I examined, I found but one to contain an excess of mineral ash; I found no perceptible trace of alum.

Bread.

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*Butter.*

Butter. In the 24 samples I found no foreign matter of importance, but 11 samples were adulterated by an excess either of water, of caseine, or of salt. The same remark has again to be made; the butter is badly made, and I do not think that the adulteration is to be attributed to the dishonesty of the makers, but rather to their want of knowledge as to how good butter should be made.

*Milk.*

Milk. Milk is usually pure and of good quality. Of the 24 samples which I analysed, four were adulterated. The adulteration consisted more particularly of the removal of the cream, a circumstance of which honest dairymen notify us; such was not the case as respects the four samples analysed. Of three samples which came from the the same dairyman two (Nos. 4695 and 5514) had been skimmed and one No. 5570) was doubtful and probably had been skimmed.

*Cocoa.*

Cocoa. Six samples which I examined had been adulterated by the addition of starch and sugar. They were labelled "Fry's cocoa," but were rather chocolate than cocoa.

*Pepper.*

Pepper. Of five samples, two were pure, and three adulterated.

*Chocolate.*

Chocolate. The six samples which I examined showed a high degree of purity.

*Candy.*

Candy. I found no injurious coloring in eight samples of mixed candy. Innocuous vegetable coloring matter is ordinarily made use of.

*Coffee.*

Coffee. Of six samples, three were pure; the other three had been adulterated by the addition of a small quantity of chicory.

*Spices.*

Spices. Out of ten samples I only found five free from adulteration. Among those adulterated there was one especially (No. 4,671) marked "mixed spices," which was nothing but starch, ground refuse grain, &c., &c., mixed with spices in the proportion of fifty per cent.

*Ginger.*

Ginger. I examined four samples of ground ginger, all were adulterated. This ginger was packed in paper covered with lead foil, and all samples of that description, whether pepper, spices or ginger, which I

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examined were grossly adulterated. In this case it is not the grocers who are to blame, for they are undoubtedly ignorant of the fact that these articles are adulterated, but those who put up, and, with great puffing, place upon the market these articles, which for the most part are unfit for consumption, although they are not injurious to health; these are the persons, I consider, whom the law should reach.

*Sugar.*

All the samples which I analysed showed a high degree of purity. Sugar.

*Tea.*

Except a few samples tea was generally pure. Tea.

Your humble and obedient servant,

M. FISET, M.D.L.,
*Analyst.*

## HALIFAX DIVISION.

HALIFAX, NOVA SCOTIA,
DECEMBER 31st, 1881.

To the Commissioner of Inland Revenue,
Ottawa.

SIR,—I have the honor of submitting my Report for the six months ending December 31st, 1881. During that time I have analysed ninety-one (91) samples. Of these seven (7) were reported adulterated and two (2) doubtful, but in only one (1) instance did I find any really injurious ingredient. Number of Samples analysed.

*Breads* were all unadulterated. Bread.

*Butters* were unadulterated and in good order, with the exception of one sample in which the caseine was slightly in excess. Butter.

*Chocolates* consisted of cocoa, sugar and starch, and were reported unadulterated. Chocolate.

*Cocoa.* All the samples submitted to me claimed to be preparations, and contained, in addition to cocoa, sugar, and from twenty-three to thirty per cent. of starches. I reported them unadulterated. Cocoa.

*Coffees* were all adulterated. Coffee.

*Pepper*, one sample was adulterated[1] Pepper.

Of twenty (20) samples of milk, fifteen (15) were unadulterated, three (3) were deficient in cream, and one (1), probably an unfair sample, contained an excessive proportion of cream. Only in two cases was I under the necessity of reporting samples as doubtful. Milk.

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Spices. *Spices* were all unadulterated.

Sugars. *Sugars*, unadulterated; all the samples submitted were refined, and of good quality.

Sweets. *Sweets*, one sample contained an excessive proportion of starch and was adulterated with gypsum.

Teas. *Teas* were unadulterated.

All of which is respectfully submitted.

I remain

Your obedient servant,

ROBT. G. FRASER.

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HALIFAX, 31st August, 1882.

To the Commissioner
of Inland Revenue.

Number of Samples analysed. SIR,—I have the honor to submit my Report on Analysis of Food, for the quarter ending the 30th June, 1882.

The number of samples examined by me was 48, of which 7 were adulterated and 1 doubtful, as shown by the following table:—

| Samples. | Pure. | Adulterated. | Doubtful. | Total. |
|---|---|---|---|---|
| Bread | 4 | | | 4 |
| Butter | 4 | | | 4 |
| Coffee | 1 | 5 | | 6 |
| Cocoa | 4 | | | 4 |
| Chocolate | 4 | | | 4 |
| Canned Fruit | 3 | | | 3 |
| Flour | 2 | | | 2 |
| Milk | 8 | 0 | 1 | 9 |
| Potted Meats | 1 | | | 1 |
| Spices | 2 | 1 | | 3 |
| Tea | 7 | 1 | | 8 |
| Total | 40 | 7 | 1 | 48 |

Bread. *Bread*,—of good quality free from alum.

Butter. *Butter*,—unadulterated, and of fair quality.

Coffee. *Coffee*.—one sample genuine, the remainder adulterated with chicory or roasted grain.

Cocoa. *Cocoa*,—good quality.

Chocolate. *Chocolate*,—good quality.

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*Canned Fruit*,—contained no metallic impurity. Canned Fruit.

*Flour*,—very good. Flour.

*Milk*,—with the exception of three samples, very good milk. Milk.

*Potted Meats*,—no metallic impurity, but meat coarse and inferior. Potted Meats.

*Spices*,—in one case cassia substituted for cinnamon. Spices.

*Tea*,—generally of fair quality. Tea.

I have the honor to be, Sir,
Your obedient servant,
MAYNARD BOWMAN,
*Public Analyst.*

## ST. JOHN DIVISION.

CHEMICAL LABORATORY, 61 PRINCE WILLIAM ST.,
ST. JOHN, N.B., 14th March, 1882.

To the Commissioner
of Inland Revenue, Ottawa.

SIR,—I have the honor to submit my Report on samples of Food material analysed by me for the Department of Inland Revenue, between 17th September, 1881, and 16th December, 1881. Number of Samples analysed.

The following is a tabulated statement of my results:—

| Name of Substance. | Not Adulterated. | Adulterated. | Total. |
|---|---|---|---|
| Allspice | 3 | ..... | 3 |
| Bread | 8 | ..... | 8 |
| Butter | 12 | 9 | 21 |
| Chocolate | 7 | ..... | 7 |
| Cinnamon | 2 | 1 | 3 |
| Cloves | 4 | ..... | 4 |
| Cocoa | 3 | 3 | 6 |
| Coffee | 8 | ..... | 8 |
| Milk | 11 | 10 | 21 |
| Pepper | 3 | 3 | 6 |
| Sugar | 9 | ..... | 9 |
| Sweets | 6 | 1 | 7 |
| Tea | 6 | 6 | 12 |
| Total | 115 | 82 | 33 |

The only "remarks" that appear necessary are, that milk and butter samples are found adulterated as frequently as ever. Tea samples contain foreign leaves and stalks, while our sample of sweets contains traces of lead.

I have the honor to be, Sir,
Your obedient servant,
W. F. BEST,
*Public Analyst.*

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St. John, N.B., 29th July, 1882.

To the Commissioner of
Inland Revenue, Ottawa.

Number of Samples analysed.

Sir,—I have the honor to submit my Report on samples of food material examined by me for the Department of Inland Revenue, between 21st March and 25th May, 1882.

The following is a tabulated statement of my results:—

| Nature of Substance Examined. | Not Adulterated. | Adulterated. | Total. |
|---|---|---|---|
| Baking Powder | 5 | ..... | 5 |
| Bread | 6 | ..... | 6 |
| Butter | 11 | 9 | 20 |
| Canned Fruit | 4 | 2 | 6 |
| Chocolate | 4 | ..... | 4 |
| Cocoa | 4 | ..... | 4 |
| Coffee | 7 | 1 | 8 |
| Flour | 4 | ..... | 4 |
| Milk | 8 | 12 | 20 |
| Pepper | ..... | 6 | 6 |
| Ginger | 3 | 4 | 7 |
| Other Spices | 4 | 6 | 10 |
| Potted Meats and Fish | 5 | 1 | 6 |
| Sugar | 6 | ..... | 6 |
| Sweets | 6 | ..... | 6 |
| Tea | 7 | 3 | 10 |
| Total | 84 | 44 | 128 |

One of the samples of "coffee" examined was composed entirely of roasted peas and chicory.

Many kinds of canned goods appear to be very dangerous articles of food.

Traces of metallic salts in solution have been detected in samples which I have examined for the Department, and for private individuals.

In a neighboring town, several persons were lately poisoned by having eaten canned beef. I am informed that dealers are in the habit of placing fresh labels on cans which have been on their shelves for years.

Such goods must eventually become quite unfit for food, as the contents of the cans will, sooner or later, act upon the solder and tin.

To prevent this, the date of manufacture should be stamped in the tin cans.

I have the honor to be, Sir,

Your obedient servant,

WILLIAM F. BEST.

*Analytical Chemist, Public Analyst.*

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MEMORANDUM of Instructions given to Collectors of Inland Revenue as to the Number of Samples to be submitted to the various Public Analysts, during the Fiscal Year ending 30th June, 1882.

| Date. | Collector of Inland Revenue. | Division. | Baking Powder. | Bread. | Butter. | Canned Fruit. | Chocolate. | Cocoa. | Coffee. | Flour. | Ginger. | Milk. | Pepper. | Potted Meats, &c. | Spices. | Sugar. | Sweets. | Tea. | Water. | Total Estimated Cost of Analysis. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1881. | | | | | | | | | | | | | | | | | | | | $ cts. | |
| Sept. 9 | W. C. Stratton. | Toronto ..... | ..... | 12 | 30 | ..... | 8 | 8 | 8 | ..... | ..... | 30 | 6 | ..... | 12 | 10 | 10 | 10 | ..... | 904 00 | |
| Oct. 10 | do ... | do ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5 | 25 00 | |
| 1882. | | | | | | | | | | | | | | | | | | | | | |
| March 14 | do ... | do ..... | 6 | 10 | 24 | 8 | 6 | 6 | 10 | 6 | 4 | 24 | 4 | 8 | 10 | 8 | 10 | 10 | ..... | 934 00 | |
| 1881. | | | | | | | | | | | | | | | | | | | | | |
| Sept. 9 | J. L. Vincent ... | Montreal ..... | ..... | 12 | 30 | ..... | 8 | 8 | 8 | ..... | ..... | 30 | 6 | ..... | 12 | 10 | 10 | 10 | ..... | 904 00 | |
| Dec. 17 | M. Mulhern..... | Cornwall..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 22 | 110 00 | |
| 1882. | | | | | | | | | | | | | | | | | | | | | |
| March 14 | J. L. Vincent.... | Montreal..... | 6 | 10 | 24 | 8 | 6 | 6 | 10 | 6 | 4 | 24 | 4 | 8 | 10 | 8 | 10 | 10 | ..... | 934 00 | |
| 1882. | | | | | | | | | | | | | | | | | | | | | |
| Feb. 27 | G. LaRue ..... | Quebec ..... | ..... | 12 | 24 | ..... | 6 | 6 | 6 | ..... | 4 | 24 | 5 | 8 | 10 | 8 | 10 | 10 | ..... | 832 00 | |
| 1881. | | | | | | | | | | | | | | | | | | | | | |
| Sept. 9 | A. McLeod ..... | Halifax..... | ..... | 6 | 20 | ..... | 5 | 5 | 5 | ..... | ..... | 20 | 4 | ..... | 7 | 6 | 5 | 8 | ..... | 576 00 | |
| 1882. | | | | | | | | | | | | | | | | | | | | | |
| March 14 | H. H. Grant .... | do ..... | 4 | 6 | 18 | 6 | 4 | 4 | 6 | 4 | 4 | 18 | 4 | 6 | 6 | 6 | 6 | 8 | ..... | 672 00 | |
| 1881. | | | | | | | | | | | | | | | | | | | | | |
| Sept. 9 | D. C. Perkins... | St. John . ..... | ..... | 6 | 20 | ..... | 5 | 5 | 5 | ..... | ..... | 20 | 4 | ..... | 7 | 6 | 5 | 8 | ..... | 576 00 | |
| 1882. | | | | | | | | | | | | | | | | | | | | | |
| March 14 | do ... | do ..... | 4 | 6 | 18 | 6 | 4 | 4 | 6 | 4 | 4 | 18 | 4 | 6 | 6 | 6 | 6 | 8 | ..... | 672 00 | |
| May 23 | W. J. Gerald.... | London..... | ..... | 4 | 6 | 4 | ..... | ..... | 6 | ..... | ..... | 6 | ..... | ..... | ..... | 4 | 4 | 6 | ..... | 230 00 | |
| March 14 | J. Griffith ..... | Sherbrooke .... | ..... | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 15 00 | Samples of bread from Bishop's College and forwarded to Dr. Edwards for analysis. |
| | | | | | | | | | | | | | | | | | | | | 7,388 00 | |



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# APPENDIX C—INSPECTION OF FOOD AND DRUGS.

TABULATED STATEMENT of the results of the Analysis of Food, for the Fiscal Year ending 30th June, 1882.

ALLSPICE.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis, and Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1881. | | | | | |
| Dec. 15.. | W. H. Ellis..... | Toronto... | 5173 | E. Lawson..... | Pure. |
| do 15... | do ..... | do ... | 5175 | J. A. Sloan..... | do |
| do 20... | do ..... | do ... | 5180 | W. Ross & Co..... | Adulterated with about 50 per cent. of peas. |
| do 20... | do ..... | do ... | 5182 | J. Berwick..... | Pure. |
| 1882. | | | | | |
| May 29... | do ..... | do ... | 5499 | J. A. Sloan..... | do |
| June 8... | do ..... | do ... | 5904 | Swan Bros..... | do |
| 1881. | | | | | |
| Oct. 6... | J. B. Edwards... | Montreal.. | 4482 | A. Shannon..... | Ash 4·2. Genuine. |
| do 6... | do ... | do ... | 4483 | T. Lamb..... | Ash 4·3. do |
| 1882. | | | | | |
| June 7... | do ... | do ... | 5836 | A. Robitaille..... | Ash 6·0. Adulterated 10 per cent. with millings and flour. |
| do 7... | do ... | do ... | 5838 | J. Hutchison..... | Ash 8·0. Genuine. |
| Dec. 26... | R. G. Fraser..... | Halifax.... | 4584 | W. H. Schwartz & Son | No adulteration. |
| June 20... | M. Bowman..... | do ... | 5340 | C. & W. Anderson..... | Pure ground allspice. |
| 1881. | | | | | |
| Oct 19... | W. F. Best..... | St John... | 4852 | W. Kennedy..... | Unadulterated. |
| do 19... | do ..... | do ... | 4853 | C. Murray..... | do |
| do 19... | do ..... | do ... | 4854 | Puddington & Merritt. | do |
| 1882. | | | | | |
| May 9... | do ..... | do ... | 5605 | A. G. Wills..... | do |
| do 9... | do ..... | do ... | 5606 | Mrs. Thomas Marter.... | do |
| do 23... | do ..... | do ... | 5634 | Jardine & Co..... | do |

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## BAKING POWDER.

| | | | | | |
|---|---|---|---|---|---|
| 1882. | | | | | |
| June 26... | W. H. Ellis..... | Toronto ... | 5910 | Britton Bros .. ..... | Cook's Friend consists of tartaric acid, carbonate of soda, mixed with flour. |
| do 26... | do ..... | do ... | 5911 | J. Duggan..... ..... | Bon-Ton consists of tartaric acid, sulphate of potash, chalk, mixed with cornstarch. |
| do 26... | do ..... | do ... | 5912 | McCormack Bros..... | Pure Gold consists of tartaric acid, carbonate of soda, mixed with cornstarch. |
| do 26... | do ..... | do ... | 5913 | J. Duncan ..... ..... | Standard consists of phosphate of lime, alum, mixed with cornstarch. |
| do 26... | do ..... | do ... | 5914 | W, B. Thompson..... | Ontario. Consists of phosphate of lime, alum, carb. of soda and cornstarch. |
| do 26... | do ..... | do ... | 5915 | H. Cerberry..... ..... | Cook's Own do do carbonate of soda, alum, mixed with cornstarch. |
| April 13... | J. B. Edwards ... | Montreal.. | 5219 | A. Lefebvre..... ..... | Cook's Friend—Good quality and free from adulteratiou. |
| do 13... | do ... | do ... | 5220 | L. A. Lapierre..... ..... | Victoria—Unadulterated and of good qualty. |
| May 9... | do ... | do ... | 5251 | Walter Paul ..... ..... | do Good quality, nothing injurious to health. |
| do 9... | do ... | do ... | 5252 | William Watt..... ..... | Hecker's Perfect—Good and wholesome quality. |
| do 9... | do ... | do ... | 5253 | M. A. Flood ..... ..... | Cook's Favourite—Wholesome and of good quality. |
| do 9... | do ... | do ... | 5254 | A. McLellan & Co..... | Cook's Best—Wholesome and of good quality. |
| April 14... | W. F. Best..... | St. John... | 4971 | Jardine & Co ..... ..... | Woodils' contains cream of tartar and carbonate of soda, with a quantity of wheat flour; nothing injurious. |
| do 14... | do ..... | do ... | 4972 | A. Myers..... ..... | Woodils' contains cream of tartar, carbonate of soda and wheat flour. |
| do 14... | do ..... | do ... | 4973 | Puddington & Merritt.. | do do do flour; nothing injurious. |
| May 9... | do ..... | do ... | 5615 | A. G. Wills..... ..... | do not adulterated; composition same as usual; sample perfectly fresh. |
| do 9... | do ..... | do ... | 5616 | Mrs. Thos. Marter..... | do do do do |

## BREAD

| | | | | | |
|---|---|---|---|---|---|
| 1882. | | | | | |
| Oct. 22... | W. H. Ellis ..... | Toronto ... | 4744 | J. Kerr ..... ..... | Unadulterated. |
| do 22... | do ..... | do ... | 4745 | P. F. Swiderski ..... | do |
| do 22... | do ..... | do ... | 4746 | J. Smith. ..... ..... | do |
| Dec. 22... | do ..... | do ... | 5162 | Miss Hahassey ..... | do |
| do 22... | do ..... | do ... | 5163 | T. Webb ..... ..... | do |
| do 22... | do ..... | do ... | 5164 | J. D. Leas..... ..... | do |
| do 22... | do ..... | do ... | 5165 | Mrs. Heaslip..... ..... | do |
| do 22... | do ..... | do ... | 5166 | John Bradley..... ..... | do |
| do 22... | do ..... | do ... | 5167 | J. Duncan ..... ..... | do |
| do 22... | do ..... | do ... | 5168 | J. Mellick ..... ..... | do |
| do 22... | do ..... | do ... | 5169 | R. Clark ..... ..... | do |
| do 22... | do ..... | do ... | 5170 | T. W. Squire..... ..... | do |
| 1882. | | | | | |
| Mar. 20... | do ..... | do ... | 5193 | T. Heaslip..... ..... | do |
| do 20... | do ..... | do ... | 5194 | A. Sinclair. ..... ..... | do |
| April 10... | do ..... | do ... | 5199 | G. Bowen ..... ..... | do |
| do 10... | do ..... | do ... | 5200 | J. Bain..... ..... | do |
| do 25... | do ..... | do ... | 5413 | F. Reynolds ..... ..... | do |
| do 25... | do ..... | do ... | 5414 | W. Carlyle..... ..... | do |



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BREAD—*Continued.*

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis and Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1882. | | | | | |
| May 9... | W. H. Ellis..... | Toronto... | 5427 | J. Little..... | Unadulterated. |
| do 9... | do ..... | do ... | 5428 | T. Richard..... | do |
| do 15... | do ..... | do ... | 5429 | Mrs. Lowe..... | do |
| do 15... | do ..... | do ... | 5430 | Mrs. Gauge..... | do |
| 1881. | | | | | |
| Nov. 20... | J. Baker Edwards | Montreal.. | 5010 | J. Miller..... | Ash 1·50 Genuine. |
| do 20... | do ... | do ... | 5011 | M. Lemieux..... | Ash 1·60 do bread. |
| do 20... | do ... | do ... | 5012 | M. Legault & Co..... | Ash 1·40 do |
| do 20... | do ... | do ... | 5013 | Edmond Vanieu ..... | Ash 1·30 do |
| do 26... | do ... | do ... | 5018 | C. Lamoureux..... | Ash 2·00 do no alum. |
| do 26... | do ... | do ... | 5019 | T. H. Malette ..... | Ash 1·80 do |
| do 26... | do ... | do ... | 5020 | J. Mageau ..... | Ash 3·00 do |
| do 26... | do ... | do ... | 5021 | A. Mulligan ..... | Ash 2·80 do |
| Dec. 15... | do ... | do ... | 5046 | M. Hayes ..... | Ash 1·80 do |
| do 15... | do ... | do ... | 5047 | P. E. Kannon..... | Ash 2·00 do |
| do 15... | do ... | do ... | 5048 | M. Aubin..... | Ash 2·50 do |
| do 15... | do ... | do ... | 5049 | D. Hayes..... | Ash 2·20 Unadulterated. |
| 1882. | | | | | |
| Mar. 18... | do ... | do ... | 5090 | Antoine Barberrei..... | Ash 5·60 Contains alum, and excess of salt, and the flour was ill-mixed; adulterated, but not seriously. |
| do 18... | do ... | do ... | 5091 | do ..... | Ash 2·60 Free from alum, and wholesome bread. |
| do 18... | do ... | do ... | 5092 | C. H. Fletcher ..... | Ash 2·30 Free from adulteration, do |
| do 31... | do ... | do ... | 5093 | A. Withebury..... | Ash 1·70 No adulteration. |
| do 31... | do ... | do ... | 5094 | E. Vincent ..... | Ash 1·60 do |
| do 31... | do ... | do ... | 5095 | Bigaouette & Frere..... | Ash 1·80 do |
| do 31... | do ... | do ... | 5096 | Joseph T. Lavigne..... | Ash 1·90 do |
| April 14... | do ... | do ... | 5221 | Alexander Watt ..... | Ash 2·00 do |
| do 14... | do ... | do ... | 5222 | Joseph Casson..... | Ash 2·10 Unadulterated. |
| do 14... | do ... | do ... | 5223 | Camille Leppe..... | Ash 1·90 do |
| do 14... | do ... | do ... | 5224 | P. Lagarde ..... | Ash 2·20 do |
| do 26... | do ... | do ... | 5271 | James Lowe ..... | Ash 2·50 Genuine. |
| do 26... | do ... | do ... | 5272 | Gravel Frere..... | Ash 2·60 do |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Mar. | 29... | M. Fiset..... | Quebec.... | 4656 | J. McKorkell ..... | Ash 0·80 | No alum, pure. |
| do | 29... | do ..... | do .... | 4657 | —Falardeau ..... | Ash 1·60 | No trace of alum, pure. |
| April | 12... | do ..... | do .... | 4674 | Jean Claise..... | Ash 1·00 | Pure. |
| do | 12... | do ..... | do .... | 4675 | N. Bernard ..... | Ash 1·20 | Pure. |
| do | 26... | do ..... | do .... | 4698 | Pageau et Darveau..... | Ash 0·60 | Pure. |
| do | 26... | do ..... | do ..... | 4699 | Gendron. ..... | Ash 2·00 | do |
| May | 10... | do ..... | do ..... | 5518 | Vachon .. ..... | Ash 1·50 | do no trace of alum. |
| do | 10... | do ..... | do .... | 5519 | Ed. Venner ..... | Ash 1·50 | do |
| do | 16... | do ..... | do .... | 5527 | Jos. Asselin ..... | Ash 2·50 | Strong in phosphates, but good. |
| do | 16... | do ..... | do .... | 5528 | Martin ..... | Ash 1·50 | Pure. |
| do | 30... | do ..... | do .... | 5550 | Louis Mercier..... | Ash 2·00 | do |
| do | 30... | do ..... | do .... | 5551 | David Bouchard..... | Ash 1·87 | do |
| | | | | | | | |
| | 1881. | | | | | | |
| Oct. | 12... | R. G. Fraser..... | Halifax.... | 4512 | Moir, Son & Co. ..... | Ash 1·50 | Unadulterated. |
| do | 13... | do ..... | do .... | 4513 | Liswell..... | Ash 1·20 | do |
| do | 14... | do ..... | do .... | 4514 | do ..... | Ash 1·60 | do |
| do | 14... | do ..... | do .... | 4515 | J. J. Scriven & Son .... | Ash 0·60 | do |
| do | 15 .. | do ..... | do .... | 4516 | do .... | Ash 0·20 | do |
| do | 15... | do ..... | do .... | 4517 | W. H. Smith..... | Ash 0·40 | do |
| | | | | | | | |
| | 1882. | | | | | | |
| June | 21... | M. Bowman..... | do .... | 5342 | Mr. Scott ..... | Ash 0·80 | do no alum. |
| do | 21... | do ..... | do .... | 5343 | do ..... | Ash 1·50 | do |
| do | 21... | do ..... | do .... | 5344 | Moir, Son & Co. ..... | Ash 1·60 | do do |
| do | 21... | do ..... | do .... | 5345 | do ..... | Ash 1·80 | do |
| | | | | | | | |
| | 1881. | | | | | | |
| Oct. | 10... | W. F. Best..... | St. John... | 4843 | S. Mitchell..... | Good quality; unadulterated. | |
| do | 10... | do ..... | do ... | 4844 | Bryden Bros..... | do | do |
| do | 10... | do ..... | do ... | 4845 | E. Hayes..... | do | do |
| do | 10... | do ..... | do ... | 4846 | J. Duncan..... | do | do |
| do | 10... | do ..... | do ... | 4847 | Shaw Bros..... | do | do |
| Dec. | 1... | do ..... | do ... | 4889 | D. N. Vanwart..... | Pure; made of wheat flour, containing no extraneous ingredient. | |
| do | 1... | do .. .... | do ... | 4890 | Samuel Tufts ..... | Not adulterated; ingredients pure and fresh. | |
| do | 1... | do ..... | do ... | 4891 | J. & W. Shaw..... | do | do do |
| | | | | | | | |
| | 1882. | | | | | | |
| April | 1... | do ..... | do ... | 4945 | Joseph Edgar..... | Pure wheaten bread; contains no extraneous flour nor foreign substances; not adulterated. | |
| do | 1... | do ..... | do .. | 4946 | E. V. Hunt ..... | Pure; no trace of alum or other extraneous mineral substance; not adulterated. | |
| May | 23... | do ..... | do ... | 5641 | J. E. Masters..... | Pure bread; no trace of alum. | |
| do | 23... | do ..... | do ... | 5642 | W. Rising ..... | Excellent bread, made of wheat flour; no trace of alum. | |
| do | 25... | do .. .... | do ... | 5647 | William Baxter..... | Pure materials used; no trace of alum. | |
| do | 25... | do ..... | do ... | 5648 | M. Spillane..... | Fresh and pure; no trace of alum. | |



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## APPENDIX C.—INSPECTION OF FOOD AND

BUTTER.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. |
|---|---|---|---|---|
| 1881. | | | | |
| Oct. 13 | W. H. Ellis | Toronto | 4742 | John Todd |
| do 13 | do | do | 4743 | Central Co-Operative Store |
| do 24 | do | do | 4749 | Brown Bros. |
| do 24 | do | do | 4750 | E. Thompson |
| Nov. 3 | do | do | 4757 | Mrs. Armstrong |
| do 3 | do | do | 4758 | J. Turner |
| do 3 | do | do | 4759 | D. Cain |
| do 3 | do | do | 4760 | Mrs. Reynolds |
| do 8 | do | do | 4763 | J. Scott & Co |
| do 8 | do | do | 4764 | Britton Bros |
| do 19 | do | do | 4772 | J. Patterson |
| do 19 | do | do | 4773 | H. Lindsay |
| do 19 | do | do | 4774 | P. Macdonald |
| do 23 | do | do | 4777 | T. Marshall |
| do 23 | do | do | 4778 | Nixon & Co |
| do 23 | do | do | 4779 | J. Burns |
| Dec. 2 | do | do | 4790 | Mrs. Cochran |
| do 2 | do | do | 4791 | R. Clark |
| do 9 | do | do | 5102 | J. Harwood |
| do 9 | do | do | 5103 | J. B. Davison |
| do 15 | do | do | 5106 | G. Faulkner |
| do 15 | do | do | 5107 | H. Tolchard |
| do 23 | do | do | 5112 | J. Park |
| do 23 | do | do | 5113 | J. Herson |
| do 23 | do | do | 5114 | Central Co-Operative Store |
| do 23 | do | do | 5115 | J. Scott & Co |
| do 29 | do | do | 5120 | Giles & Son |
| do 29 | do | do | 5121 | W. T. Brown |
| do 29 | do | do | 5122 | Geo. Ratcliff |
| do 29 | do | do | 5123 | Sutherland Bros |
| 1882. | | | | |
| March 20 | do | do | 5191 | E. K. Scoley |
| do 20 | do | do | 5192 | Humphrey & Jackson |
| April 4 | do | do | 5197 | W. Binney |
| do 4 | do | do | 5198 | Mrs. McGorman |
| do 14 | do | do | 5403 | W. Messer |
| do 14 | do | do | 5404 | J. J. Woolings |
| do 19 | do | do | 5407 | S. Hazlett |
| do 19 | do | do | 5408 | J. Clark |
| do 19 | do | do | 5411 | F. Somers |
| do 19 | do | do | 5412 | C. Petters |
| do 28 | do | do | 5433 | R. Hamilton |
| do 28 | do | do | 5434 | J. Dickson |
| May 4 | do | do | 5448 | F. C. Withers |
| do 4 | do | do | 5449 | Mrs. Cochrane |
| do 4 | do | do | 5450 | W. Pinkham |
| do 12 | do | do | 5454 | Gordon Aird |
| do 12 | do | do | 5455 | W. Martin |
| do 12 | do | do | 5456 | H. Tyfe |
| do 23 | do | do | 5459 | Britton Bros |
| do 23 | do | do | 5460 | J. Funston |
| do 23 | do | do | 5461 | Central Co-Operative Store |
| June 1 | do | do | 5481 | Mrs. Cross |
| do 1 | do | do | 5482 | Mrs. White |
| do 24 | do | do | 5943 | J. Dowswell |

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DRUGS.—Tabulated Statement, &c.—*Continued.*

| Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|
| Butter Fat | Caseine. | Salt. | Water. | |
| per cent. | per cent. | per cent. | per cent. | |
| 83·1 | 1·5 | 2·4 | 13·0 | Unadulterated. |
| 80·2 | 1·5 | 9·3 | 9·0 | do |
| 72·8 | 3·5 | 6·7 | 17·0 | Too much salt and water. |
| 81·3 | 0·8 | 4·8 | 13·1 | Unadulterated. |
| 82·6 | 1·1 | 5·2 | 11·1 | do |
| 87·1 | 0·9 | 1·6 | 10·4 | do |
| 80·8 | 1·0 | 8·8 | 9·4 | do |
| 84·9 | 1·6 | 4·5 | 9·0 | do |
| 88·5 | 1·2 | 2·2 | 8·1 | do |
| 80·7 | 1·1 | 9·0 | 9·2 | do |
| 81·1 | 1·3 | 7·3 | 10·3 | do |
| 84·9 | 0·7 | 2·7 | 11·7 | do |
| 89·4 | 1·1 | 1·8 | 7·7 | do |
| 86·0 | 1·2 | 3·7 | 9·1 | do |
| 88·3 | 1·2 | 1·5 | 9·0 | do |
| 81·8 | 1·2 | 5·6 | 11·4 | do |
| 78·0 | 1·0 | 7·2 | 13·8 | Contains too much salt and water. |
| 84·2 | 1·3 | 2·7 | 11·8 | Unadulterated. |
| 84·0 | 1·1 | 2·2 | 12·7 | do |
| 85·0 | 1·1 | 3·4 | 10·5 | do |
| 84·8 | 1·0 | 2·9 | 11·3 | do |
| 85·2 | 1·7 | 2·9 | 10·2 | do |
| 86·1 | 0·8 | 2·5 | 10·6 | do |
| 72·8 | 1·4 | 15·1 | 10·7 | Too much salt and water. |
| 85·7 | 1·2 | 3·7 | 9·4 | Unadulterated. |
| 85·7 | 0·9 | 3·5 | 9·9 | do |
| 82·6 | 0·8 | 6·9 | 9·7 | do |
| 80·0 | 1·7 | 5·4 | 12·9 | do |
| 86·3 | 0·8 | 3·0 | 9·9 | do |
| 87·9 | 1·2 | 2·1 | 8·8 | do |
| 80·4 | 1·0 | 7·3 | 11·3 | do |
| 82·7 | 1·1 | 4·6 | 11·6 | do |
| 87·1 | 1·0 | 2·3 | 9·6 | do |
| 75·1 | 0·9 | 9·3 | 14·7 | Contains too much salt and water. |
| 88·2 | 1·0 | 2·9 | 7·9 | Unadulterated. |
| 85·2 | 1·5 | 5·7 | 7·6 | do |
| 87·2 | 1·9 | 2·8 | 9·1 | do |
| 81·5 | 1·6 | 3·8 | 13·0 | do |
| 80·0 | 1·1 | 8·2 | 10·7 | do |
| 81·2 | 1·8 | 4·5 | 9·5 | do |
| 88·7 | 2·0 | 1·9 | 7·4 | do |
| 84·7 | 0·7 | 3·5 | 11·1 | do |
| 85·0 | 0·7 | 5·3 | 9·0 | do |
| 80·0 | 1·7 | 5·3 | 13·0 | do |
| 83·5 | 0·8 | 3·0 | 12·7 | do |
| 88·2 | 1·0 | 1·6 | 9·2 | do |
| 83·3 | 1·5 | 7·0 | 8·2 | do |
| 80·4 | 1·3 | 3·2 | 15·1 | do |
| 81·8 | 1·5 | 2·4 | 11·3 | do |
| 80·5 | 1·5 | 4·4 | 13·6 | do |
| 85·3 | 1·6 | 1·6 | 11·5 | do |
| 87·0 | 0·7 | 3·6 | 8·7 | do |
| 80·9 | 1·2 | 2·3 | 15·6 | do |
| 83·1 | 1·4 | 3·8 | 11·7 | do |

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## APPENDIX C.—INSPECTION OF FOOD AND

BUTTER.—

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. |
|---|---|---|---|---|
| 1881. | | | | |
| Sept. 15 | J. Baker Edwards | Montreal | 4423 | Charles Champagne |
| do 15 | do | do | 4424 | Joseph Lamarche |
| do 15 | do | do | 4425 | James Bourgele |
| do 15 | do | do | 4426 | Ferdinand Gaulin |
| do 29 | do | do | 4468 | N. Renaud |
| do 29 | do | do | 4469 | N. Collins |
| do 29 | do | do | 4470 | N. Grenier |
| do 29 | do | do | 4471 | Hague & Cornu |
| Oct. 13 | do | do | 4488 | J. Baillargeon |
| do 13 | do | do | 4489 | T. Conway |
| do 13 | do | do | 4490 | James Mageau |
| do 13 | do | do | 4491 | C. Donais |
| Nov. 18 | do | do | 5006 | Victor Perreault |
| do 18 | do | do | 5007 | E. Vincent |
| do 18 | do | do | 5008 | Theo. Desjardins |
| do 18 | do | do | 5009 | E. Beauchamp |
| do 25 | do | do | 5014 | Gravel Frères |
| do 25 | do | do | 5015 | A. O. Gauthier |
| do 25 | do | do | 5016 | Wm. Dodd |
| do 25 | do | do | 5017 | Wm. Elliott |
| Dec. 3 | do | do | 5030 | M. J. Spellessey |
| do 3 | do | do | 5031 | R. McShane |
| do 3 | do | do | 5032 | T. Flint |
| do 3 | do | do | 5033 | Hy. Bogue |
| do 10 | do | do | 5038 | E. Cunningham |
| do 10 | do | do | 5039 | C. Lamoureaux |
| do 10 | do | do | 5040 | T. H. Malette |
| do 10 | do | do | 5041 | S. Mageau |
| do 16 | do | do | 5050 | John Doyle |
| do 16 | do | do | 5051 | Z. Menuier |
| 1882. | | | | |
| March 29 | do | do | 5235 | Avila Favreau |
| do 29 | do | do | 5236 | Antoine Lefebvre |
| do 29 | do | do | 5237 | T. Decarie |
| do 29 | do | do | 5238 | M. Gascon |
| April 12 | do | do | 5247 | Walter Paul |
| do 12 | do | do | 5248 | J. E. Pattingale |
| do 12 | do | do | 5249 | Geo. Jordan |
| do 12 | do | do | 5250 | Wm. Watt |
| do 26 | do | do | 5263 | James Lowe |
| do 26 | do | do | 5264 | Bigaouette et Frère |
| do 26 | do | do | 5265 | Gravel Frères |
| do 26 | do | do | 5266 | John Scanlon |
| May 10 | do | do | 5801 | J. Shea |
| do 10 | do | do | 5802 | J. Z. Phillip |
| do 10 | do | do | 5803 | Charles Champagne |
| do 10 | do | do | 5804 | Jacques Simard |
| do 30 | do | do | 5811 | Edmond Renaud |
| do 30 | do | do | 5812 | Alphonse Hague |
| do 30 | do | do | 5813 | H. J. A. Huot |
| do 30 | do | do | 5814 | Alfred Mallette |
| June 7 | do | do | 5827 | Simeon Boisseau |
| do 7 | do | do | 5828 | François Couturier |
| do 7 | do | do | 5829 | Louis Brageau |
| do 7 | do | do | 5830 | F. X. Lareau |
| April 3 | M. Fiset | Quebec | 4661 | E. Tremblay |
| do 3 | do | do | 4662 | Et. Paradis |
| do 7 | do | do | 4667 | P. Paquet |

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DRUGS.—Tabulated Statement, &c.—*Continued.*

*Continued.*

| Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|
| Butter Fat. | Caseine. | Salt. | Water. | |
| per cent. | per cent. | per cent. | per cent. | |
| 87·5 | 2·5 | 4·0 | 6·0 | Genuine, but rancid. |
| 49·80 | ..... ..... | 5·0 | ..... | Adulterated with other fats to the extent of 45·20 p.c. |
| 74·2 | 6·5 | 8·0 | 11·3 | do excess of salt, water and curds. |
| 41·5 | 5·5 | 4·0 | 5·0 | do 44 p.c. of other meat fats. |
| 40·0 | 6·0 | 3·0 | 6·0 | do 51 p.c. of foreign fats. |
| 76·0 | 5·0 | 8·0 | 11·0 | do salt and water; rancid and unfit for food. |
| 90·0 | ..... | ..... | 10·0 | Greasy butter; rancid and unfit for food. |
| 81·0 | 5·0 | 3·0 | 11·0 | Cheesy butter, rather rancid and excess of water—adulterated |
| 76·0 | 1·0 | 11·6 | 11·40 | Rancid and adulterated with excess of salt and water. |
| 80·0 | 3·0 | 5·0 | 12·0 | Bleached and rancid butter; unfit for food; excess of water. |
| 82·0 | 5·0 | 5·0 | 8·0 | Cheesy butter; rancid but genuine. |
| 86·0 | 3·0 | 5·0 | 6·0 | Genuine. |
| 84·0 | 1·0 | 6·0 | 9·0 | Rancid butter; unfit for food; not adulterated. |
| 86·0 | 1·0 | 4·0 | 9·0 | Good butter. |
| 82·0 | 2·0 | 5·0 | 11·0 | Rancid butter, with excess of water. |
| 86·0 | 3·0 | 6·0 | 5·0 | Good butter. |
| 87·5 | 1·1 | 5·0 | 6·4 | Genuine butter. |
| 86·0 | 1·5 | 5·5 | 7·0 | do |
| 84·0 | 2·5 | 6·5 | 7·0 | do but rancid. |
| 87·5 | 1·2 | 5·3 | 6·0 | do |
| 87·5 | 1·1 | 4·4 | 7·0 | do and good butter. |
| 86·5 | 1·5 | 5·0 | 7·0 | Fair butter. |
| 82·0 | 4·2 | 5·1 | 8·7 | Genuine, but rancid. |
| 85·0 | 1·5 | 5·5 | 8·0 | Fair butter. |
| 86·0 | 2·5 | 4·5 | 7·0 | Genuine. |
| 84·0 | 2·0 | 5·5 | 8·5 | do |
| 80·0 | 1·0 | 9·0 | 10·0 | Adulterated with excess of water. |
| 86·8 | 1·1 | 7·1 | 5·0 | Genuine. |
| 87·0 | 1·0 | 4·0 | 8·0 | do |
| 81·5 | 5·0 | 8·0 | 10·0 | Adulterated with excess of salt and water. |
| 76·70 | 1·30 | 11·50 | 10·50 | Adulterated with excess of salt and water. |
| 78·50 | 1·50 | 11·50 | 8·50 | do excess of salt. |
| 84·20 | 1·80 | 6·40 | 7·60 | Genuine. |
| 82·60 | 1·40 | 6·80 | 9·20 | do |
| 82·00 | 2·00 | 8·00 | 8·00 | do |
| 86·50 | 1·50 | 4·20 | 7·80 | do |
| 82·00 | 2·00 | 11·00 | 5·00 | do but excess of salt. |
| 88·50 | 1·50 | 5·10 | 0·90 | do |
| 82·00 | 2·00 | 5 00 | 11·00 | do excess of salt. |
| 85·00 | 1·00 | 5·00 | 9·00 | do |
| 84·00 | 2·00 | 6·00 | 8·00 | do |
| 78·00 | 2·00 | 8·00 | 12·00 | Adulterated with excess of salt and water. |
| 84·00 | 2·00 | 6·00 | 8·00 | Genuine butter, but somewhat rancid. |
| 85·00 | 1·50 | 6·50 | 7·00 | do salt butter. |
| 77·50 | 2·00 | 8·50 | 12·00 | Adulterated with excess of salt and water. |
| 76·50 | 2·50 | 10·00 | 11·00 | do do do |
| 82·00 | 2·00 | 6·50 | 9·50 | Genuine salt butter; water in excess. |
| 6 ·00 | 1·00 | 8·00 | ..... | Adulterated with 21 p.c. of other fats, chiefly lard. |
| 82· 0 | 2·50 | 3·00 | 12 00 | Genuine, but rancid from excess of water. |
| 86·00 | 1·50 | 3·50 | 9·00 | do |
| 83·50 | 2·00 | 6·00 | 9·50 | do water in excess. |
| 80·50 | 1·10 | 4·10 | 14·00 | do excess of water. |
| 78·40 | 2·10 | 9·30 | 12·20 | Adulterated with excess of salt and water. |
| 83·50 | 1·50 | 5·00 | 11· 0 | Genuine, but excess of water. |
| 84 9· | 3 60 | 2·60 | 8·90 | True. |
| 83·40 | 4·02 | 2·18 | 10·40 | do but there is an excess of water and caseine. |
| 2 6 | 2·80 | 2·50 | 11·64 | Fresh butter; slight excess of water. |

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## APPENDIX C.—INSPECTION OF FOOD AND

BUTTER.—

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. |
|---|---|---|---|---|
| **1882.** | | | | |
| April 7 | M. Fiset | Quebec | 4668 | — Langster |
| do 12 | do | do | 4678 | Wm. Arial |
| do 12 | do | do | 4679 | Jos. Morency |
| do 17 | do | do | 4686 | J. O. Marier |
| do 17 | do | do | 4687 | L. Crepeau |
| do 26 | do | do | 4696 | Leo. Bertrand |
| do 26 | do | do | 4697 | do |
| May 4 | do | do | 5505 | J. B. Delaurier |
| do 4 | do | do | 5506 | Charles McKibbon |
| do 10 | do | do | 5516 | Frs. Sanfacon |
| do 10 | do | do | 5517 | — Bilodeau |
| do 16 | do | do | 5525 | — Barbeau |
| do 16 | do | do | 5526 | — Marier |
| do 23 | do | do | 5538 | N. Coté |
| do 23 | do | do | 5539 | Baller et Frère |
| June 6 | do | do | 5562 | Magloire Giguere |
| do 6 | do | do | 5563 | do |
| do 6 | do | do | 5564 | Honore Belleau |
| do 6 | do | do | 5565 | do |
| do 12 | do | do | 5572 | — Langlois |
| do 12 | do | do | 5573 | Ph. Paradis |
| **1881.** | | | | |
| Oct. 4 | R. G. Fraser | Halifax | 4508 | C. Graham & Co |
| do 4 | do | do | 4509 | J. H. Nisbet |
| do 4 | do | do | 4510 | W. M. Mumford & Sons |
| do 18 | do | do | 4521 | Joseph Groves |
| do 18 | do | do | 4522 | C. Craig |
| do 18 | do | do | 4523 | Thomas Doyle |
| Nov. 4 | do | do | 4527 | M. Flynn |
| do 4 | do | do | 4528 | W. D. Harrington |
| do 4 | do | do | 4529 | Charles Anderson |
| do 17 | do | do | 4539 | Edward Moran |
| do 17 | do | do | 4540 | Thomas Hemsworth |
| do 17 | do | do | 4541 | Philip Hire |
| Dec. 5 | do | do | 4555 | John Ead |
| do 5 | do | do | 4556 | George Call |
| do 5 | do | do | 4557 | C. McCarthy |
| do 19 | do | do | 4573 | Mrs. E. Wicks |
| do 19 | do | do | 4574 | Michael Murphy |
| do 19 | do | do | 4575 | J. H. Nisbet |
| do 23 | do | do | 4578 | William Lane |
| do 23 | do | do | 4579 | Michael J. Clinton |
| **1882.** | | | | |
| May 16 | Maynard Bowman | do | 5312 | C. McCarthy |
| do 16 | do | do | 5313 | John Hogan |
| June 14 | do | do | 5337 | Dillon Bros. |
| do 14 | do | do | 5338 | T. S. Lownds |
| **1881.** | | | | |
| Sept. 17 | W. F. Best | St. John | 4809 | J. A. Turner |
| do 17 | do | do | 4810 | G. T. Purves |

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DRUGS.—Tabulated Statement, &c.—*Continued.*

*Continued.*

| Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|
| Butter Fat | Caseine. | Salt. | Water. | |
| per cent. | per cent. | per cent. | per cent. | |
| 79·84 | 5·36 | 2·60 | 12·20 | Fresh butter; excess of water and caseine. |
| 81·10 | 2·60 | 4·00 | 12·30 | Salt butter; too much salt and water. |
| 88·40 | 3·40 | 2·20 | 6·00 | True salt butter. |
| 83·10 | 3·50 | 2·34 | 11·06 | Salt butter; little excess of water. |
| 80·90 | 3·78 | 2·92 | 12·40 | do too much water. |
| 67·00 | 15·20 | 8·20 | 9·60 | Too much salt and caseine; bad butter. |
| 86·96 | 3·40 | 4·00 | 5·64 | Salt butter; unadulterated. |
| 83·20 | 2·70 | 2·10 | 12·00 | Fresh butter; good, but too much water. |
| 76·20 | 4·56 | 5·34 | 13·90 | Salt butter; too much caseine and water. |
| 85·40 | 1·60 | 3·70 | 9·30 | Good fresh butter. |
| 87·52 | 1·36 | 1·40 | 9·72 | do do |
| 83·40 | 2·70 | 3·50 | 10·40 | do salt do |
| 77·20 | 6·30 | 6·50 | 10·00 | Too much caseine and salt. |
| 82·30 | 5·40 | 3·40 | 8·90 | Excess of caseine. |
| 82·62 | 3·80 | 4·20 | 9·38 | Good fresh butter. |
| 87·45 | 3·00 | 3·40 | 6·15 | do do |
| 86·84 | 2·26 | 2·70 | 8·20 | do do |
| 88·80 | 1·70 | 3·20 | 6·30 | do do |
| 86·10 | 1·60 | 2·40 | 9·90 | do do |
| 85·40 | 2·10 | 3·00 | 9·50 | do salt do |
| 87·52 | 1·34 | 3·40 | 7·74 | do |
| 92·0 | 0·2 | 4·5 | 3·3 | No adulteration. |
| 87·0 | 0·1 | 4·5 | 7·0 | do |
| 90·0 | 0·7 | 7·3 | 2·0 | do |
| 85·2 | 1·8 | 6·0 | 7·0 | do |
| 84·5 | 2·5 | 3·0 | 10·0 | do |
| 83·0 | 2·0 | 10·0 | 5·0 | do |
| 88·0 | 0·7 | 6·5 | 4·8 | do |
| 90·0 | 0·3 | 5·0 | 4·7 | do |
| 90·0 | 1·0 | 3·0 | 6·0 | do |
| 87·0 | 1·0 | 6·5 | 5·5 | do |
| 88·3 | 2·7 | 4·0 | 5·0 | do |
| 82·8 | 4·2 | 5·0 | 8·0 | Excess of caseine. |
| 85·0 | 2·3 | 4·7 | 8·0 | No adulteration. |
| 91·2 | 0·3 | 6·5 | 2·0 | do |
| 86·5 | 0·5 | 8·0 | 5·0 | do |
| 89·5 | 0·2 | 5·5 | 4·8 | do |
| 88·8 | 0·35 | 6·55 | 4·3 | do |
| 81·0 | 1·0 | 7·6 | 10·4 | do |
| 87·0 | 0·5 | 7·0 | 5·5 | do |
| 89·5 | 1·0 | 4·5 | 5·0 | do |
| 83·35 | 0·50 | 8·8 | 7·35 | Unadulterated. |
| 87·30 | 1·1 | 4·9 | 6·7 | do |
| 83·40 | 1·15 | 8·40 | 7·05 | do |
| 89·45 | 0·30 | 2·35 | 7·90 | do |
| 78·0 | 5·0 | 8·0 | 9·0 | Not adulterated. |
| 61·0 | 19·0 | 5·50 | 14·50 | Excess of caseine. |

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## APPENDIX C.—INSPECTION OF FOOD AND

BUTTER.—

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. |
|---|---|---|---|---|
| 1881. | | | | |
| Sept. 17 | W. F. Best | St. John | 4811 | L. Nelson |
| Oct. 10 | do | do | 4837 | R. Carlton |
| do 10 | do | do | 4838 | J. A. & A. W. Morrell |
| do 10 | do | do | 4839 | A. Emery & Co |
| do 24 | do | do | 4877 | L. A. Smith |
| do 24 | do | do | 4878 | Geo. Robertson |
| do 24 | do | do | 4879 | Taylor & Dockrill |
| Nov. 23 | do | do | 4886 | J. E. Masters |
| do 23 | do | do | 4888 | J. Brittain |
| do 23 | do | do | 4888 | John Coholan |
| Dec. 1 | do | do | 4906 | King Bros. |
| do 1 | do | do | 4907 | J. E. Masters |
| do 1 | do | do | 4908 | E. V. Hunt |
| do 10 | do | do | 4912 | S. Tufts |
| do 10 | do | do | 4913 | Logan, Lindsay & Co |
| do 10 | do | do | 4914 | Puddington & Merrit |
| do 16 | do | do | 4918 | John Foster |
| do 16 | do | do | 4919 | Jardine & Co. |
| do 16 | do | do | 4920 | George Robertson |
| 1882. | | | | |
| March 21 | do | do | 4923 | G. Foster |
| do 21 | do | do | 4924 | R. R. Achir |
| April 1 | do | do | 4947 | Joseph Edgar |
| do 1 | do | do | 4948 | E. V. Hunt |
| do 8 | do | do | 4955 | Smith & Trites |
| do 8 | do | do | 4956 | King Bros |
| do 14 | do | do | 4957 | Samuel Tufts |
| do 14 | do | do | 4958 | A. Myers |
| do 25 | do | do | 4993 | J. Foster |
| do 25 | do | do | 4994 | R. Ritchie |
| May 9 | do | do | 5617 | Mrs. R. Wallace |
| do 9 | do | do | 5618 | J. D. McAvity |
| do 13 | do | do | 5623 | Smith & Trites |
| do 13 | do | do | 5624 | W. A. Magee |
| do 19 | do | do | 5627 | D. H. Spragg |
| do 19 | do | do | 5628 | C. A. Clark |
| do 23 | do | do | 5641 | Bonnel & Cowen |
| do 23 | do | do | 5632 | E. V. Hunt |
| do 25 | do | do | 5645 | W. Baxter |
| do 25 | do | do | 5646 | M. Spillane |

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DRUGS.—Tabulated Statement, &c.—*Continued.*

*Continued.*

| Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|
| Butter Fat | Caseine. | Salt. | Water. | |
| per cent. | per cent. | per cent. | per cent. | |
| 65·25 | 9·75 | 10·50 | 14·50 | Not adulterated; slight excess of salt and caseine. |
| 82·75 | 1·50 | 3·50 | 12·25 | Too much water, otherwise the butter would be excellent. |
| 88·00 | 1·25 | 2·50 | 8·25 | Unadulterated. |
| 88·50 | 1·50 | 1·25 | 8·75 | Very fair butter. |
| 83·00 | 2·50 | 0·50 | 14·00 | Not adulterated. |
| 87·00 | 2·00 | 1·25 | 9·75 | do |
| 77·25 | 2·25 | 1·75 | 18·75 | Too much water. |
| 82·00 | 2·75 | 2·25 | 13·00 | do |
| 83·50 | 4·50 | 3·75 | 8·25 | Good butter. |
| 88·00 | 4·00 | 1·25 | 6·75 | do |
| 75·00 | 5·00 | 13·50 | 6·50 | Genuine butter; excess of salt. |
| 85·50 | 5·50 | 4·0 | 6·0 | Butter of fair quality. |
| 71·50 | 8·50 | 12·50 | 7·50 | Contains excess of butter-milk and salt, but no foreign fats. |
| 76·00 | 8·00 | 5·50 | 10·50 | Genuine butter of poor quality. |
| 74·00 | 5·50 | 10·50 | 10·00 | Fair quality. |
| 79·25 | 2·50 | 10·25 | 8·00 | do salt butter. |
| 91·00 | 1·25 | 3·00 | 4·75 | Not adulterated. |
| 85·50 | 2·00 | 3·50 | 9·00 | do |
| 92·00 | 2·00 | 2·50 | 3·50 | do |
| 69·50 | 4·00 | 12·40 | 14·10 | Adulterated with excess of water and salt. |
| 67·40 | 3·20 | 11·25 | 18·15 | do do do |
| 77·00 | 9·00 | 4·50 | 9·50 | Not adulterated. |
| 80·50 | 4·00 | 5·50 | 10·00 | do |
| 88·00 | 2·25 | 3·50 | 6·25 | do |
| 84·50 | 1·00 | 9·50 | 5·00 | do |
| 84·00 | 0·75 | 8·25 | 7·00 | do |
| 80·25 | 0·50 | 6·75 | 12·50 | do |
| 81·40 | 2·20 | 7·40 | 9·00 | Excess of water and salt. |
| 81·0 | 2·50 | 5·50 | 11·0 | Water and salt in excess. |
| 73·50 | 2·50 | 5·00 | 19·00 | Excess of water. |
| 69·50 | 4·25 | 9·75 | 16·50 | do |
| 80·00 | 1·30 | 6·50 | 12·20 | Not adulterated. |
| 87·50 | 0·85 | 2·50 | 9·15 | do |
| 88·0 | 1·0 | 2·25 | 8·75 | do |
| 82·0 | 0·90 | 9·10 | 8·00 | Too much salt. |
| 81·75 | 0·80 | 5·00 | 12·45 | Not adulterated. |
| 79·50 | 0·50 | 10·00 | 10·00 | do |
| 85·0 | 1·0 | 3·50 | 10·50 | do too much water. |
| 83·0 | 4·70 | 2·00 | 10·30 | Too much water. |

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## APPENDIX C—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

### CANNED FRUIT.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Result of Analysis and Remarks of the Analyst. |
|---|---|---|---|---|---|
| 1882. | | | | | |
| May 12 | W. H. Ellis | Toronto | 5934 | W. Martin | Yellow peaches; contains traces of tin. |
| do 12 | do | do | 5935 | Toronto Tea Co. | Apples do do iron and tin. |
| do 12 | do | do | 5936 | Mrs. Bilton | Yellow peaches do do tin. |
| do 12 | do | do | 5837 | J. Cleghorn | Gage plums do do iron and tin. |
| do 12 | do | do | 5938 | H. Wingfield | Blackberries do do tin. |
| do 12 | do | do | 5939 | Mrs. Clegg | Pine apple do do iron and tin. |
| do 12 | do | do | 5940 | T. Miller | Fresh pears do do do |
| do 12 | do | do | 5941 | R. S. Gallagher | Peaches do do do |
| April 12 | J. Baker Edwards | Montreal | 5283 | J. Robertson | Pine apple; excellent in flavor and free from metallic impurity. |
| do 12 | do | do | 5284 | do | Tomatoes; good quality do do do |
| do 12 | do | do | 5285 | Crawford & Gordon | Baked pears; excellent in flavor do do do |
| do 12 | do | do | 5286 | do | Strawberries; very good for cooking purposes; slight impregnation of iron. |
| May 17 | do | do | 5295 | R. McShane | Apples; excellent and free from metallic taint. |
| do 17 | do | do | 5296 | A. Quintal | Peaches; good and free from metals. |
| do 17 | do | do | 5297 | E. S. Cadieux | Preserved corn; excellent; no impurity. |
| do 17 | do | do | 5298 | do | Peas; good color and flavor and free from copper and other metals |
| do 17 | do | do | 5299 | Gordon Packing Co | Tomatoes; good; no metallic impurities. |
| June 24 | Maynard Bowman | Halifax | 5346 | Hessin & Devine | Pine apple; in good condition; contains nothing injurious. |
| do 24 | do | do | 5347 | do | Peach; fruit rather hard do do |
| do 24 | do | do | 5348 | do | Plum; in good order do do |
| April 14 | W. F. Best | St. John | 4961 | C. S. MacGregor | Strawberries; traces of metallic impurities; fruit mostly unripe, hard and unwholesome. |
| do 14 | do | do | 4962 | W. Magee | Tomatoes; traces of metallic impurities; fruit mostly sound and well preserved. |
| do 14 | do | do | 4978 | Geo. Robertson | Pine apple; no metallic impurity; the fruit hard and stringy. |
| do 14 | do | do | 4979 | Jardine & Co. | Peaches; exrellent; no traces of metallic impurities. |
| May 23 | do | do | 5635 | Geo. Robertson | Pine apple; fresh and pure do do |
| do 23 | do | do | 5636 | Jardine & Co. | Pears; perfectly do do do |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 1882. | | | | | | |
| May | 29 | W. H. Ellis | Toronto | 5901 | Caldwell & Hodgins | Pure. |
| do | 29 | do | do | 5902 | do | do |
| 1881. | | | | | | |
| Dec. | 25 | R. G. Fraser | Halifax | 4585 | W. H. Schwartz & Sons' | do |

## CLOVES.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1881. | | | | | | |
| Dec. | 15 | W. H. Ellis | Toronto | 5172 | R. Donald | Contains clove stalks. |
| do | 15 | do | do | 5174 | Fulton & Michie | Pure. |
| do | 20 | do | do | 5179 | J. Seaton | Consists of cloves adulterated with about 50 p.c. of flour and turmeric. |
| do | 20 | do | do | 5181 | T. McMillan | Pure. |
| 1882. | | | | | | |
| June | 26 | do | do | 5903 | T. Lumbers | Contains 50 p.c. of peas. |
| do | 26 | do | do | 5905 | J. W. Lang & Co | do do |
| do | 26 | do | do | 5906 | Central Co-Operative Store. | do stalks. |
| do | 26 | do | do | 5908 | W. Grant | do 5 to 10 p.c. of peas. |
| do | 26 | do | do | 5909 | H. Lindsay | Pure. |
| 1881. | | | | | | |
| Oct. | 13 | J. Baker Edwards | Montreal | 4498 | T. Conway | Ash 4·0. Adulterated with clove bark, pea meal and millings. |
| do | 13 | do | do | 4499 | J. Baillargeon | do 3·50 do largely with pimento, millings and wheat flour, very little cloves. |
| do | 13 | do | do | 4500 | C. Donais | Ash 5·0. Largely adulterated, chiefly pimento, roasted peas and millings, very little cloves. |
| Nov. | 16 | do | do | 5001 | Joseph Gauthier | Largely adulterated; chiefly pimento, roasted peas, corn and millings; very little, if any, cloves. |
| 1882. | | | | | | |
| May | 5 | do | do | 5275 | Louis P. Lavoie | Ash 2·5. Adulterated with 40 p.c. of millings, Indian corn, pea meal and pimento. |
| do | 5 | do | do | 5276 | Jean Lauder | Ash 2·8. Adulterated with pimento, farina and millings to the extent of 40 to 50 p.c. |
| 1881. | | | | | | |
| Dec. | 25 | R. G. Fraser | Halifax | 4587 | W. H. Schwartz & Son | No adulteration. |
| Oct. | 19 | W. F. Best | St. John | 4848 | C. Murray | do |
| do | 19 | do | do | 4849 | William Martin | Pure and unadulterated. |
| do | 19 | do | do | 4850 | King Bros | Unadulterated. |
| do | 19 | do | do | 4851 | R. B. Gilmour & Co | do |
| 1882. | | | | | | |
| March | 21 | do | do | 4935 | A. C. McMurtry | Adulterated with 20 p.c. of flour. |
| do | 21 | do | do | 4934 | B. McCrossin | do 10 to 15 p.c. of meal. |



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## APPENDIX C—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

### CINNAMON.

| Date | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Result of Analysis and Remarks of the Analyst. |
|---|---|---|---|---|---|
| 1881. | | | | | |
| Dec. 15 | W. H. Ellis | Toronto | 5176 | G. Giles & Sons | Composed of cassia. |
| do 15 | do | do | 5177 | W. Martin | Consists of cassia, mixed with flour. |
| do 15 | do | do | 5178 | W. Parkhill | Composed of cassia. |
| 1882. | | | | | |
| June 26 | do | do | 5907 | J. S. Earl | do do and peas. |
| 1881. | | | | | |
| Oct. 13 | J. Baker Edwards | Montreal | 4486 | T. Conway | Ash 3·0. Contains no cinnamon; consists of ground cassia, largely adulterated with pea meal and millings. |
| do 13 | do | do | 4487 | J. Baillargeon | Ash 3·6. No cinnamon or cassia; ground pimento, largely adulterated with roasted pea meal, flour and millings. |
| do 13 | do | do | 4496 | C. Doncais | Ash 2·5. Ground cassia, adulterated with about 25 p.c. of wheat flour and millings. |
| do 13 | do | do | 4497 | Joseph Gauthier | Ash 2·7. Ground cassia, adulterated with rice flour and millings. |
| 1882. | | | | | |
| May 5 | do | do | 5273 | Jean Lauder | Ash 2·5. Cassia, adulterated with about 30 p.c of Indian corn, pea meal and millings. |
| do 5 | do | do | 5274 | Louis P. Lavoie | Ash 4·5. Cassia, adulterated with 20 p.c. of millings and farine. |
| June 20 | R. G. Fraser | Halifax | 5339 | C. & W. Anderson | Cassia substituted for cinnamon. |
| 1881. | | | | | |
| Oct. 19 | W. F. Best | St. John | 4855 | C. Murray | Unadulterated. |
| do 19 | do | do | 4856 | Puddington & Merritt | do |
| do 19 | do | do | 4857 | Wm. Martin | Nothing has been added, except a small quantity of flour less than 5 p.c. |
| 1882. | | | | | |
| April 14 | do | do | 4984 | R. Ritchie | Adulterated with 10 p.c. of corn meal. |
| do 14 | do | do | 4985 | John Foster | do 20 do meal. |
| do 14 | do | do | 4986 | W. Magee | Contains 90 p.c. of ground cassia and 10 p.c. of flour. |
| do 14 | do | do | 4987 | D. N. Vanwart | Consists of ground cassia, with 20 p.c. of corn starch. |

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## CHOCOLATE.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis. | | | Remarks by the Analyst. |
|---|---|---|---|---|---|---|---|---|
| | | | | | Cocoa. | Sugar. | Flour. | |
| 1881. | | | | | p. cent. | p. cent. | p. cent. | |
| Dec. 1 | W. H. Ellis..... | Toronto.... | 4780 | J. Shields & Co..... | ..... | ..... | ..... | Pure cocoa. |
| do 1 | do ..... | do ... | 4781 | J. Dowswell ..... | 45·0 | 50·0 | 5·0 | Santé. |
| do 1 | do ..... | do ... | 4782 | J. H. Greenshields ..... | 40·0 | 55·0 | 5·0 | Cadbury's London chocolate. |
| do 1 | do ..... | do ... | 4783 | J. Lumsden..... | 50·0 | 50·0 | ..... | Taylor Bros.' soluble cocoa. |
| do 1 | do ..... | do ... | 4784 | J. Sloan..... | 55·0 | 45·0 | ..... | Part of the fat has been removed from the cocoa. |
| do 1 | do ..... | do ... | 4785 | Caldwell & Hodgins.... | 50·0 | 50·0 | ..... | Cadbury's Mexican chocolate. |
| do 1 | do ..... | do ... | 4786 | G. Slade..... | 50·0 | 25·0 | 25·0 | Todhunter's chocolate. |
| do 1 | do ..... | do ... | 4787 | G. Henderson..... | 55·0 | 45·0 | ..... | Taylor Bros.' soluble. Part of the fat has been removed from the cocoa. |
| 1882. | | | | | | | | |
| May 8 | do ..... | do ... | 5415 | R. Donald ..... | 60·0 | 40·0 | ..... | do do do do |
| do 8 | do ..... | do ... | 5416 | W. Martin..... | 50·0 | 50·0 | ..... | Todhunter's fine French. |
| do 8 | do ..... | do ... | 5417 | G. Downard ..... | 50·0 | 50·0 | ..... | Santé sweet. |
| do 8 | do ..... | do ... | 5418 | J. Jeffrey..... | 66·0 | 34·0 | ..... | Fine Mexican. |
| do 8 | do ..... | do ... | 5419 | James Lumsden..... | 55·0 | 45·0 | ..... | Todhunter. |
| do 8 | do ..... | do ... | 5420 | T. Giles & Co..... | 50·0 | 50·0 | ..... | do |
| 1881. | | | | | | | | |
| Sept. 15 | J. Baker Edwards | Montreal... | 4427 | J. Flynn..... | ..... | ..... | ..... | Manufactured by the Canada Manufacturing Co. Largely composed of sugar, but unadulterated; cocoa paste about 10 p.c. |
| do 15 | do ... | do ... | 4428 | do ..... | ..... | ..... | ..... | Unadulterated; cocoa paste about 20 p.c. |
| do 15 | do ... | do ... | 4429 | A. Robitaille & Co ..... | ..... | ..... | ..... | Rose Bros.' Diamond. Unadulterated; cocoa extract about 60 p.c. |
| do 15 | do ... | do ... | 4430 | Alphonzie Piche ..... | ..... | ..... | ..... | Rowntree's soluble. Unadulterated; cocoa extract about 50 p.c. |
| do 22 | do ... | do ... | 4440 | B. Wallace..... | ..... | ..... | ..... | Tester's. Unadulterated; cocoa extract about 10 p.c. |
| do 22 | do ... | do ... | 4441 | J. B. Freeman..... | ..... | ..... | ..... | do do do 20 do |
| do 22 | do ... | do ... | 4442 | do ..... | ..... | ..... | ..... | do do do 10 do |
| do 22 | do ... | do ... | 4443 | Bigaouette Frères..... | ..... | ..... | ..... | Fry's Diamond do do 50 do |



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## APPENDIX C—INSPECTION OF FOOD AND DRUGS.—Tabulated Statement, &c.—*Continued.*

### CHOCOLATE—*Concluded.*

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cocoa. | Sugar. | Flour. | — | |
| 1881. | | | | | | | | | |
| April 5 | J. Baker Edwards | Montreal .. | 5205 | L. P. Lavoie | ..... | ..... | ..... | ..... | Fry's Diamond. Unadulterated. Ash, 1·6. |
| do 5 | do ... | do ... | 5206 | F. X. Tessier | ..... | ..... | ..... | ..... | Rose Bros.' Diamond do do 2·0. |
| do 5 | do ... | do ... | 5207 | L. A. Lapierre | ..... | ..... | ..... | ..... | Chocolate menier do do 2·0. |
| do 5 | do ... | do ... | 5208 | do | ..... | ..... | ..... | ..... | Fry's caracas do do 1·8. |
| do 5 | do ... | do ... | 5209 | George McGarry | ..... | ..... | ..... | ..... | Cadbury's Mexican do do 2·0. |
| do 5 | do ... | do ... | 5210 | T. Gauthier | ..... | ..... | ..... | ..... | Taylor's soluble. Contains glucose. Is of inferior quality, but not adulterated. Ash, 4·0. |
| March 29 | M. Fiset | Quebec. ... | 4659 | A. Paré | ..... | ..... | ..... | ..... | Thomas' chocolate, No. 1. Pure. |
| April 15 | do ..... | do ... | 4680 | J. B. Z. Dubeau. | ..... | ..... | ..... | ..... | Fry & Sons' do do |
| do 26 | do ..... | do ... | 5502 | J. A. Turcotte | ..... | ..... | ..... | ..... | Thomas' do do do |
| May 10 | do ..... | do ... | 5522 | Blumhart & Rivern | ..... | ..... | ..... | ..... | Fry's Diamond do |
| do 23 | do ..... | do ... | 5541 | Normand & Chouinard. | ..... | ..... | ..... | ..... | Thomas' chocolate, No. 1 do |
| June 6 | do ..... | do ... | 5566 | A. Drolet | ..... | ..... | ..... | ..... | Fry's do do |
| do 6 | do ..... | do ... | 5567 | do | ..... | ..... | ..... | ..... | Fry's Hoœœopathic. |
| 1881. | | | | | | | Starch, &c. | Foreign Fat. | |
| Nov. 11 | R. G. Fraser | Halifax. ... | 4542 | J. H. Nisbet | 65·0 | 5·0 | 30·0 | 24·0 | No adulteration. Ash, 2·0. |
| do 11 | do ..... | do ... | 4543 | W. D. Harrington | 68·0 | 5·0 | 27·0 | ..... | do do 2·05. |
| do 13 | do ..... | do ... | 4544 | W. M. Harrington | 50·0 | 20·0 | 30·0 | 25·0 | do do 0·8. |
| do 13 | do ..... | do ... | 4545 | J. P. Mott & Co. | 73·0 | 4·0 | 23·0 | 26·0 | do do 2·1. |
| do 13 | do ..... | do ... | 4546 | W. D. Harrington. | 78·0 | 22·0 | ..... | 22·0 | do do 3·9. |
| 1882. | | | | | | | | | |
| April 28 | Mayn'rd Bowman | do ... | 5328 | T. Hemsworth | ..... | ..... | ..... | ..... | Mott's chocolate. Contains nothing injurious. |
| do 28 | do ... | do ... | 5329 | E. Donahoe | ..... | ..... | ..... | ..... | Thomas' chocolate. Unadulterated. |
| do 28 | do ... | do ... | 5330 | W. H. Schwartz & Son. | ..... | ..... | ..... | ..... | Contains nothing injurious. |
| do 28 | do ... | do ... | 5331 | J. Scott & Co | ..... | ..... | ..... | ..... | Rowntree's Queen chocolate. Unadulterated. |
| 1881. | | | | | | | | | |
| October 10 | W. F. Best | St. John... | 4834 | Puddington & Merritt. | ..... | ..... | ..... | ..... | Fry's caracas. Nothing has been added to this chocolate or taken from it since it left the manufacturer's hands. Unadulterated. |

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| do | 10 | do | ..... | do | ... | 4835 | Armstrong Bros..... | ..... | ..... | ..... | ..... | Rowntree's chocolate do do do |
| do | 10 | do | ..... | do | ... | 4836 | W. A. Porter ..... | ..... | ..... | ..... | ..... | Mott's chocolate do Fresh and unadulterated. |
| do | 19 | do | ..... | do | ... | 4862 | Puddington & Merritt.. | ..... | ..... | ..... | ..... | do Fresh and pure as it left factory. |
| | | | | | | | | | | Farina. | | |
| do | 24 | do | ..... | do | ... | 4871 | Taylor & Dockrill ..... | 50·0 | ..... | 40·0 | 10·0 | do Fresh and fit for food. |
| do | 24 | do | ..... | do | ... | 4872 | Geo. Robertson ..... | 60·0 | 40·0 | ..... | ..... | Rowntree's Queen chocolate. |
| do | 24 | do | ..... | do | ... | 4873 | Logan, Lindsay & Co . | 60·0 | 30·0 | 10·0 | ..... | Fry's chocolate. |
| 1882. | | | | | | | | | | | | |
| March | 21 | do | ..... | do | ... | 4943 | S. Tufts ..... ..... | 35·0 | 2·0 | 59·0 | 4·0 | Mott's do |
| do | 21 | do | ..... | do | ... | 4944 | G. Robertson. ..... | 69·0 | 15·0 | 12·50 | 3·50 | Rowntree's Queen chocolate. |
| May | 9 | do | ..... | do | ... | 5613 | A. G. Wills ..... ..... | 39·0 | 15·0 | 46·0 | ..... | Fry's do |
| do | 9 | do | . ..... | do | ... | 5614 | R. B. Gilmour & Co.... | ..... | ..... | ..... | ..... | Mott's chocolate. Not adulterated. Contains nothing injurious. |

4—35****

## COCOA.

| | | | | | | | | Cocoa. | Sugar. | Farina. | Arrow-root. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1881. | | | | | | | | | | | | |
| Dec. | 15 | W. H. Ellis..... | | Toronto ... | | 4793 | Shields Bros ..... | 30·0 | 45·0 | ..... | ..... | Black's Iceland Moss. 25 p.c. of cornstarch and Iceland Moss. |
| do | 15 | do | ..... | do | ... | 4793 | R. N. Sheppard ..... | 20·0 | 50·0 | 30·0 | ..... | Todhunter's cocoa. |
| | | | | | | | | | | 25·0 | | |
| do | 15 | do | ..... | do | ... | 4794 | J. McLean..... ..... | 40·0 | 35·0 | 25·0 | | do |
| do | 15 | do | ..... | do | ... | 4795 | L. Equi. .... ..... | 40·0 | 35·0 | | | do |
| do | 15 | do | ..... | do | ... | 4796 | R. Jaffray ..... ..... | 50·0 | 25·0 | ..... | 25·0 | Epps' homœpathic cocoa. |
| do | 15 | do | ..... | do | ... | 4797 | F. S. Roberts..... ..... | 30·0 | 45·0 | ..... ..... | ..... ..... | Black's Iceland Moss cocoa. 25 p.c. of cornstarch and Iceland Moss. |
| do | 15 | do | ..... | do | ... | 4798 | McCormack Bros..... | ..... | ..... | ..... | ..... ... | Cadbury's cocoa essence, from which two thirds of the fat has been removed. |
| do | 15 | do | ..... | do | ... | 4799 | F. A. Cowan.. ..... | 50·0 | 25·0 | ..... ... | 25·0 | Epps' homœpathic cocoa. |
| 1882. | | | | | | | | | | | | |
| May | 9 | do | ..... | do | ... | 5421 | W. Ratcliff. ..... ..... | 50·0 | 25·0 | ..... | 25·0 | do do |
| do | 9 | do | ..... | do | ... | 5422 | Toronto Tea Co..... | 40·0 | 25·0 | 35·0 | ..... | Todhunter & Co.'s cocoa. |
| do | 9 | do | ..... | do | ... | 5423 | E. Anderson..... ..... | 40·0 | 30·0 | ..... | 30·0 | do do |
| | | | | | | | | | | 30·0 | | |
| do | 9 | do | ..... | do | ... | 5424 | W. Parkhill..... ..... | 40·0 | 30·0 | | | |
| do | 9 | do | ..... | do | ... | 5425 | W. Robertson ... ..... | 40·0 | 30·0 | 30·0 | ..... ..... | Russell & Co.'s do |
| do | 9 | do | ..... | do | ... | 5426 | J. H. Greenshields ..... | 40·0 | 30·0 | 30·0 | ..... | Todhunter & Co.'s do |



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## APPENDIX C—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

### COCOA—*Concluded.*

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cocoa. | Sugar and Arrowroot. | Farina. | Arrow-root. | |
| 1881. | | | | | | | | | |
| October 1 | J. Baker Edwards | Montreal.. | 4464 | N. Collins..... ..... | 50·0 | 50·0 | ..... | ..... | Epps's prepared. Genuine. |
| | | | | | | Sugar and Fat. | | | |
| do 1 | do ... | do ... | 4465 | Bigaoutte et Frère..... | 60·0 | 40·0 | ..... | ..... | Rock cocoa do |
| do 1 | do ... | do ... | 4466 | do ..... | ..... | ..... | ..... | ..... | Dessicated cocoanut. Genuine. This contains no broma cocoa, but is an excellent culinary preparation of the palm cocoanut, "Cocos nucifera." well preserved and sweetened. |
| do 1 | do ... | do ... | 4467 | do ..... | ..... | ..... | ..... | ..... | Cocoaline, or Canadian tea. A worthless preparation (being ground inner husk of cocoa bean), yielding a beverage of no value. |
| do 6 | do ... | do ... | 4478 | A. Shanuon..... ..... | 60·0 | ..... | ..... | ..... | Rock cocoa. Saccharine, &c., 40 p. c. Genuine cocoa and sugar. Ash, 4·5. |
| do 6 | do ... | do ... | 4479 | T Lamb..... ..... | ..... | ..... | ..... | ..... | Cadbury's cocoa essence. Genuine, an old package but still good. Ash, 6·0. |
| do 6 | do ... | do ... | 4480 | do .... ..... | ..... | ..... | ..... | ..... | Fry's soluble. Spoiled by long keeping; musty and unfit for food. Ash, 2 6. |
| do 6 | do ... | do ... | 4481 | P. A. Gannon..... | ..... | ..... | ..... | ..... | Fry's homœopathic. Genuine cocoa and arrowroot, equal parts. Ash, 2 5. |
| 1882. | | | | | | | | | |
| April 3 | do ... | do ... | 5201 | Bigaoutte et frère..... | 50·0 | ..... | ..... | ..... | Epp's prepared. 50 p. c. of sugar and arrowroot. Unadulterated. Ash, 1·6. |
| do 3 | do ... | do ... | 5202 | do . ..... | 60·0 | 40·0 | ..... | ..... | Taylor's soluble. Unadulterated. Ash, 1·3. |
| do 3 | do ... | do ... | 5203 | Joseph Lavigne..... | 50·0 | ..... | 50·0 | ..... | Fry's homœopathic do do 1·5. |
| do 3 | do ... | do ... | 5204 | William Elliott..... | 50·0 | 50·0 | | ..... | London pearl cocoa do do 1·7. |
| do 5 | do ... | do ... | 5211 | P. Maloney..... | 50·0 | 50·0 | | ..... | Riolett & Co.'s prepared cocoa. Adulterated with pea flour, and indian corn. |
| do 5 | do ... | do ... | 5212 | George McGarry..... | 80·0 | ..... ..... | .... ..... | ..... | Cadbury's cocoa essence. Sago and starch 19 p.c., fat 1 p.c., ash, 0·4. Very pure and free from fat. |

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| March | 29 | M. Fiset..... | Quebec. ... | 4658 | A. Paré..... | ..... | ..... | ..... | ..... | Fry's homœopathic. Chocolate with an admixture of wheat flour. |
| April | 15 | do ..... | do ... | 4682 | J. B. Z. Dubeau . ..... | ..... | ..... | ..... | ..... | Fry's Iceland moss. Good preparation, but is a chocolate rather than cocoa, and contains starch. |
| do | 26 | do ..... | do ... | 4700 | A. J. Turcotte..... ..... | ..... | ..... | ..... | ..... | Fry's Iceland moss. Chocolate and not cocoa. |
| May | 10 | do ..... | do ... | 5521 | Blumhart & Riverin.... | ..... | ..... | ..... | ..... | Fry's homœopathic. Chocolate rather than cocoa. |
| do | 23 | do ..... | do ... | 5540 | Normand & Chouinard. | ..... | ..... | ..... | ..... | do do do |
| 1881. | | | | | | | | | | |
| Nov. | 13 | R. G. Fraser..... | Halifax.... | 4547 | W. D. Harrington..... | 50·0 | 22·0 | ..... | 28·0 | do No adulteration. Cocoa fat, 25 p.c. Ash, 1·0. |
| do | 13 | do ..... | do ... | 4548 | J. H. Nesbit..... ..... | 54·0 | 26·0 | ..... | 20·0 | do No adulteration do 1·3. |
| do | 13 | do ..... | do ... | 4549 | W. M Harrington & Co | 50·0 | 26·0 | 24·0 | | do do |
| do | 13 | do ..... | do ... | 4550 | James Scott & Co..... | 50·0 | 28·0 | 22·0 | | do do |
| do | 13 | do ..... | do ... | 4551 | J. P. Mott & Co..... | 45·0 | 30·0 | ..... | ..... | do do Fat 22 p.c. 2·2. |
| 1882. | | | | | | | | | | |
| April | 28 | M. Bowman..... | do ... | 5324 | J. Scott & Co..... ..... | 60·0 | 30·0 | ..... | ..... | Epp's cocoa. Unadulterated. |
| do | 28 | do ..... | do ... | 5325 | W. H. Schwartz..... | 58·0 | 31·0 | ..... | ..... | Rowntrees homœopathic do |
| do | 28 | do ..... | do ... | 5326 | do ..... | ..... | 35·0 | ..... | ..... | do do |
| do | 28 | do ..... | do ... | 5327 | J. Scott & Co ..... ..... | 70·0 | 25·0 | ..... | ..... | Motts' cocoa do |
| 1881. | | | | | | | | | | |
| Sept. | 17 | W. F. Best..... | St. John... | 4819 | L. Nelson..... ..... | ..... | ..... | ..... | ..... | Epp's cocoa. Contains from 40 to 50 p. c. of wheat flour. Adulterated. |
| do | 17 | do ..... | do ... | 4820 | G. T. Purves ..... ..... | ..... | ..... | ..... | ..... | Motts' cocoa. Contains from 20 to 30 p.c. of starch, and 5 to 10 p.c. of sugar. Adulterated. |
| October | 19 | do ..... | do ... | 4861 | Puddington & Merritt... | ..... | ..... | ..... | ..... | Rowntrees homœopathic. The cocoa in this sample is pure but homœopathic, in quantity as well as in name. Cocoa from 20 to 25 p.c. as it came from the manufacturer. |
| do | 24 | do ..... | do ... | 4874 | Logan, Lindsay & Co.. | 45·0 | 20·0 | 35·0 | ..... | Motts' cocoa. |
| do | 24 | do ..... | do ... | 4875 | Taylor & Dockrill..... | 85·0 | 5·0 | 10·0 | ..... | Cadbury's cocoa. |
| do | 24 | do ..... | do ... | 4876 | George Robertson..... | 65·0 | 25·0 | 10·0 | ..... | Epp's cocoa. |
| 1882. | | | | | | | | | | |
| March | 21 | do ..... | do ... | 4931 | S. Tufts..... ..... | 45·50 | 29·50 | 25·0 | ..... | do Unadulterated. |
| do | 21 | do ..... | do ... | 4932 | Alex. Porter..... ... | 53·50 | 11·0 | 35·50 | ..... | do do |
| May | 9 | do ..... | do ... | 5611 | C. Murray & Co..... | 40·0 | 15·0 | 45 0 | ..... | Taylor Bro's Maravilla cocoa. |
| do | 9 | do ..... | do ... | 5612 | J. Smith..... ..... | 55·0 | 20·0 | 25·0 | ..... | Epp's cocoa. |



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## APPENDIX C—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

### COFFEE.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis, and Remarks by the Analyst. |
|---|---|---|---|---|---|
| **1881.** | | | | | |
| Nov. 14 | W. H. Ellis..... | Toronto... | 5124 | J. Good & Co..... | Contains about 40 p. c. of chicory. |
| do 14 | do ..... | do ... | 5125 | Central Co-operative Store..... | Pure. |
| do 14 | do ..... | do ... | 5126 | George Scott ..... | Contains about 50 p. c. of chicory. |
| do 14 | do ..... | do ... | 5127 | H. G. Brown..... | do 40 do |
| do 14 | do ..... | do ... | 5128 | Thomas Reed..... | do 60 do |
| do 14 | do ..... | do ... | 5129 | J. W. Lang..... | do 40 do and peas. |
| do 14 | do ..... | do ... | 5130 | W. Bradshaw ..... | do 45 do do |
| do 14 | do ..... | do ... | 5131 | E. K. Scoley..... | Pure. |
| **1882.** | | | | | |
| June 2 | do ..... | do ... | 5462 | Toronto Tea Co..... | Unadulterated. Ash, 4·9 p.c. |
| do 2 | do ..... | do ... | 5463 | J. Burns..... | Adulterated with between 40 to 50 p.c. of chicory and flour. |
| do 2 | do ..... | do ... | 5464 | J. Clarkson..... | do about 50 p.c. of chicory. |
| do 2 | do ..... | do ... | 5465 | Mrs. A. Carrick..... | do 50 p.c. of chicory. |
| do 2 | do ..... | do ... | 5466 | J. W. McLean..... | do about 40 p.c. of chicory. |
| do 2 | do ..... | do ... | 5467 | P. McDonald ..... | do 30 do |
| do 2 | do ..... | do ... | 5468 | J. E. Kingston..... | do flour and about 60 p.c. of chicory. |
| do 2 | do ..... | do ... | 5469 | J. Good & Co..... | do about 30 p.c. of chicory. |
| do 2 | do ..... | do ... | 5470 | O. Somers ..... | do 60 per cent. of chicory. |
| do 2 | do ..... | do ... | 5471 | Mrs. Englis..... | do 30 do |
| **1881** | | | | | |
| Dec. 1... | J. B. Edwards ... | Montreal.. | 5026 | J. Lauds..... | Ash 4·80. Largely adulterated with chicory and roasted corn or peas (about 40 p. c.) |
| do 1... | do ... | do ... | 5027 | J. P. Lavoie..... | do 4·5. Adulterated about 30 per cent. with chicory and roasted peas. |
| do 1... | do ... | do ... | 5028 | Antoine Gauthier..... | do 5·0. do 20 do do corn. |
| do 1... | do ... | do ... | 5029 | F. X. Garrau..... | do 4·2. do 40 do do peas. |
| do 19... | do ... | do ... | 5052 | Victor Perrault..... | do 3·8 Adulterated with chicory and roasted peas, &c., about 20 per cent. |
| do 19... | do ... | do ... | 5053 | E. Vincent..... | do 3 5. do about 40 per cent. with chicory roasted peas and corn. |
| do 19... | do ... | do ... | 5054 | Theo. Desjardin..... | do 4·0. do 30 do pea meal and roasted corn. |
| do 19... | do ... | do ... | 5055 | E. Beauchamp ..... | do 3·6. do 40 do roasted peas and corn. |

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|---|---|---|---|---|---|---|---|---|---|
| 1882. | | | | | | | | | |
| April 26... | do ... | do ... | 5300 | James Lowe..... | | do | 20 | do | with millings, chicory and Indian corn. |
| do 26... | do ... | do ... | 5839 | Bigaouette et frère..... | do 2·0. | do | with chicory and roasted corn. | | |
| do 26... | do ... | do ... | 5840 | A. Cusson ... ..... | do 2·0. | do | do | do | |
| do 26... | do ... | do ... | 5841 | A Robitaille & Co ..... | do 2·2. | do | with roasted corn and peas. | | |
| do 26... | do ... | do ... | 5842 | R. McShane..... ..... | do 4·4. | do | by chicory. | | |
| do 26... | do ... | do ... | 5843 | do ..... | do 2·4. | do | with chicory and the usual admixture of roasted corn and millings. | | |
| do 26... | do ... | do ... | 5844 | A Quintal..... | do 4·0. | do | with pea meal and roasted corn and chicory. | | |
| do 26... | do ... | do ... | 5845 | do ..... | do 4·1. | do | chicory and roasted peas. | | |
| do 26... | do ... | do ... | 5846 | W. Reynolds..... | do 2·6. | do | do | roasted corn and peas. | |
| do 26... | do ... | do ... | 5847 | Mathew Rappel..... | do 4·4. | do | do | and roasted peas. | |
| do 7... | M. Fiset ..... | Quebec.... | 4669 | F. X. Grenier..... | do 4·5. | Pure. | | | |
| do 22... | do ..... | do ... | 4692 | A. J. Turcotte..... | | Adulterated with a little chicory; moisture, 3·6 per cent. | | | |
| May 4... | do ..... | do ... | 5507 | J. B. Rousseau..... | | do | by mixing with chicory. | | |
| do 16... | do ..... | do ... | 5531 | Dubeau & Prevost..... | do 3·75. | do | with a little chicory. | | |
| June 6... | do ..... | do ... | 5568 | A. Drolet..... | do 4·5. | Pure. | | | |
| do 6... | do ..... | do.. ... | 5569 | do ..... | do 4·0. | do | | | |
| 1881. | | | | | | | | | |
| Dec. 8... | R. G. Fraser..... | Halifax.... | 4558 | J. H. Nisbet..... ..... | do 5·25. | Adulterated with a small quantity of chicory. | | | |
| do 8... | do ..... | do ... | 4559 | do ..... | do 6·5. | do | chicory. | | |
| do 8... | do ..... | do ... | 4560 | Thomas Hemsworth..... | do 6·25. | do | do | and roast grain. | |
| do 8... | do ..... | do ... | 4561 | Philip Hire..... | do 5·35. | do | do | | |
| do 8... | do ..... | do ... | 4562 | do ..... ..... | do 9·35. | do | do | and roasted grain. | |
| 1882. | | | | | | | | | |
| April 28... | M. Bowman..... | do ... | 5306 | T. Hemsworth..... | do 3·95. | do | with 30 per cent. of chicory. | | |
| do 28... | do ..... | do ... | 5307 | do ..... | do 4·3. | Genuine. | | | |
| do 28... | do ..... | do ... | 5308 | E O. Donahoe..... | do 4·5. | Adulterated with 25 per cent. of chicory. | | | |
| May 13... | do ..... | do ... | 5309 | W. D. Harrington..... | do 4·37. | do | 10 | do | and roasted grain. |
| do 13... | do ..... | do ... | 5310 | J. H. Nesbit..... | do 4·3. | do | 20 | do | do |
| do 13... | do ..... | do ... | 5311 | do ..... | do 4·0. | do | 30 | do | do |
| 1881. | | | | | | | | | |
| Sept. 17... | W. F. Best ..... | St. John... | 4821 | G. T. Purves..... ..... | Pure ground coffee. | | | | |
| do 17... | do ..... | do ... | 4822 | Puddington & Merritt . | do | | | | |
| do 17... | do ..... | do ... | 4823 | J. A. Turner..... | do | | | | |
| do 17... | do ..... | do ... | 4824 | Weldon Bros..... | Pure and unadulterated. | | | | |
| Oct. 19... | do ..... | do ... | 4863 | J. M. Hastings..... | do | | | | |
| do 19... | do ..... | do ... | 4864 | King Bros..... ..... | do | | | | |
| do 19... | do ..... | do ... | 4865 | R. B. Gilmour & Co.... | do | | | | |
| do 19... | do ..... | do ... | 4866 | William Martin..... | do | | | | |
| 1883. | | | | | | | | | |
| Mar. 21... | do ..... | do ... | 4941 | A. C. McMurtry..... | Not adulterated | | | | |
| do 21... | do ..... | do ... | 4942 | Alex. Porter..... | do | | | | |



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## APPENDIX C.—INSPECTION OF FOOD AND DRUGS—Tabulated Statements, &c.—*Continued.*

COFFEE—*Concluded.*

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1882. | | | | | |
| April 14... | W. F. Best..... | St. John... | 4963 | Holland & Co..... | A mixture of roasted peas and chicory ; contains no genuine coffee. |
| do 14... | do ..... | do ... | 4964 | John Devine..... | Genuine ground coffee. |
| do 14... | do ..... | do ... | 4965 | Jardine & Co..... | do |
| do 14... | do ..... | do ... | 4966 | Geo. Robertson ..... | do |
| May 9... | do ..... | do ... | 5603 | R. B. Gilmour..... | A pure article, not adulterated. |
| do 9... | do ..... | do ... | 5604 | Mrs. Thomas Marter.... | Not adulterated, but of inferior strength. |

FLOUR.

| | | | | | |
|---|---|---|---|---|---|
| 1882. | | | | | |
| May 3... | W. H. Ellis..... | Toronto.... | 5472 | J. Lumber..... | Pure. |
| do 3... | do ..... | do ... | 5473 | John Robertson.. ..... | do |
| do 3... | do ..... | do ... | 5474 | J. Rooney..... | do |
| do 3... | do ..... | do ... | 5475 | W D. McIntosh..... | do |
| do 3... | do ..... | do ... | 5476 | J. & J. N. Andrews.... | do |
| do 3... | do ..... | do ... | 5477 | P. Nicolle ..... | do |
| April 13... | J. B. Edwards... | Montreal.. | 5217 | A. J. Corbeil..... | Ash 1·6. Genuine wheat flour. |
| do 13... | do ... | do ... | 5218 | Joseph Lavigne..... | do 1·5. do |
| May 10... | do ... | do ... | 5255 | Walter Paul ..... | do 1·8. Unadulterated. |
| do 10... | do ... | do ... | 5256 | J. E. Pattingale..... | do 1·7. Genuine. |
| do 10... | do ... | do ... | 5257 | Nicholas Kearns..... | do 1·8. do |
| do 10... | do ... | do ... | 5258 | A. McLellan & Co..... | do 1·7. do |
| April 28... | M. Bowman..... | Halifax.... | 5332 | Edward Donohoe..... | do 0·60. Unadulterated. |
| do 28... | do ..... | do .... | 5333 | T. Hemsworth ..... | do 0·65. do |
| do 1... | W. F. Best..... | St. John... | 4949 | W. Baxter..... | Water, 13; starch, 59; gluten, 13; albumen, 2. On microscopical examination, found no trace of fungi or foreign starch grains, nor any trace of mineral matter. |
| do 1... | do ..... | do ... | 4950 | Mrs. C. Johnston..... | Water, 13·50; starch, 60·50; gluten, 13; albumen, 1·75. Can detect nothing like fungi or foreign starch grains; no mineral adulteration. |
| May 9... | do ..... | do ... | 4997 | Alex. Porter..... | Genuine wheat flour, without any adulteration. |
| do 9... | do ..... | do ... | 4998 | C. Murray & Co..... | Not adulterated. |

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## GINGER.

| | | | | | |
|---|---|---|---|---|---|
| 1881. Dec. 15... | W. H. Ellis..... | Toronto.... | 5171 | Swan Bros ..... | Pure. |
| 1882. May 29... | do ..... | do ... | 5495 | J. A. Sloan ..... | do |
| do 29... | do ..... | do ... | 5496 | Caldwell & Hodgins.... | do |
| do 29... | do ..... | do ... | 5497 | A. Rennick ..... | Contains about 10 per cent. of flour. |
| do 29... | do ..... | do ... | 5498 | T. Lumbers ..... | Contains about 10 to 15 per cent of flour and turmeric. |
| 1881. Oct. 6... | J. B. Edwards ... | Montreal .. | 4484 | A Shannon ..... | Ash 3·00. Adulterated with 30 per cent. of wheat flour. |
| do 6... | do ... | do ... | 4485 | T. Gauthier..... | do 4·00. Largely adulterated with mustard husk, flour andt urmeric. |
| 1882. May 12... | do ... | do ... | 5259 | Nicholas Kearns..... | do 2·5. Adulterated over 20 per cent. with wheat flour and turmeric. |
| do 12... | do ... | do ... | 5260 | M. A. Flood..... | do 2·6. do 30 do do |
| do 12... | do ... | do ... | 5261 | A. McLellan & Co ..... | do 2.1. do 20 do do |
| do 12... | do ... | do ... | 5262 | E. Elliott & Co..... | do 2·4. Adulterated about 20 per cent. with wheat flour and turmeric. |
| do 22... | M. Fiset..... | Quebec .... | 5542 | Normand & Chouinard. | do 2·75. do with starch. |
| do 30... | do ..... | do .... | 5553 | W. Reed..... | do 3·60. do with a little starch. |
| do 30... | do ..... | do .... | 5554 | Charles McKibbon..... | do 21·00. do with sand and starch and colored with turmeric. |
| do 30... | do ..... | do .... | 5555 | André Bourget..... | do 2·36. do with starch and coloured with turmeric. |
| 1881. Dec. 21... | R. G. Fraser..... | Halifax.... | 4586 | W. H. Schwartz & Sons | No adulteration. |
| 1882. Mar. 21... | W. F. Best ..... | St. John.. | 4939 | S. Tufts ..... | Adulterated with 10 per cent. of meal. |
| do 21... | do ..... | do ... | 4940 | Alex. Porter..... | Not adulterated. |
| April 14... | do ..... | do ... | 4988 | W. A. Magee..... ..... | Adulterated with about 10 per cent. of flour. |
| do 14... | do ..... | do ... | 4989 | D. N. Vanwart ..... | do with 20 per cent. of flour. |
| do 14... | do ..... | do ... | 4990 | A. Myers..... ..... | do with something less than 10 per cent. of flour. |
| do 14 .. | do ..... | do ... | 4991 | John Foster..... ..... | Not adulterated. |
| do 14... | do ..... | do ... | 4992 | R. Ritchie..... | do |

## MACE.

| | | | | | |
|---|---|---|---|---|---|
| 1881. Dec. 25... | R. G. Fraser..... | Halifax.... | 4588 | W. H. Schwartz & Sons | No adulteration. |
| 1882. May 23... | W. F. Best..... | St. John... | 5633 | George Robertson..... | do |



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## APPENDIX C—INSPECTION OF FOOD AND MILK.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Butter Fat. | Caseine. |
|---|---|---|---|---|---|---|
| 1881. | | | | | p. cent. | p. cent. |
| Oct. 17 | W. H. Ellis..... | Toronto..... | 4740 | Mrs. O'Rourke..... | 2·6 | 2·7 |
| do 17 | do ..... | do ..... | 4741 | J. Jackson ..... | 3·4 | 4·2 |
| do 24 | do ..... | do ..... | 4747 | J. Lee..... | 3·2 | 3·0 |
| do 24 | do ..... | do ..... | 4748 | S. Fraser..... | 3·5 | 4·0 |
| Nov. 3 | do ..... | do ..... | 4751 | Mrs. Egbert..... | 3·1 | 2·6 |
| do 3 | do ..... | do ..... | 4752 | P. Murphy..... | 3·4 | 3·5 |
| do 3 | do ..... | do ..... | 4753 | J. Tyler..... | 2·9 | 2·3 |
| do 3 | do ..... | do ..... | 4754 | S. Prout..... | 3·0 | 2·5 |
| do 3 | do ..... | do ..... | 4755 | T. Lamb ..... | 4·0 | 5·4 |
| do 3 | do ..... | do ..... | 4756 | J. Poynter..... | 3·4 | 3·3 |
| do 12 | do ..... | do ..... | 4761 | R. McGregor ..... | 3·5 | 2·3 |
| do 12 | do ..... | do ..... | 4762 | J. Wightman..... | 3·1 | 3·4 |
| do 19 | do ..... | do ..... | 4770 | F. Sole..... | 3·2 | 3·8 |
| do 19 | do ..... | do ..... | 4771 | J. Jackson..... | 2·3 | 2·8 |
| do 23 | do ..... | do ..... | 4775 | A. Caskie..... | 3·4 | 3·8 |
| do 23 | do ..... | do ..... | 4776 | E. J. Doyle..... | 3·3 | 3·5 |
| Dec. 2 | do ..... | do ..... | 4788 | R. G. Playter..... | 2·7 | 2·7 |
| do 2 | do ..... | do ..... | 4789 | Mrs. Perkins..... | 3·1 | 2·7 |
| do 9 | do ..... | do ..... | 4800 | J. Mead..... | 3·1 | 4·0 |
| do 9 | do ..... | do ..... | 5101 | P. McCormack..... | 3·0 | 3·1 |
| do 15 | do ..... | do ..... | 5104 | J. Harwood..... | 4·5 | 3·5 |
| do 15 | do ..... | do ..... | 5105 | R. Pike..... | 4·0 | 3·7 |
| do 15 | do ..... | do ..... | 5108 | C. W. Malton..... | 3·3 | 4·0 |
| do 15 | do ..... | do ..... | 5109 | T. Spies..... | 2·4 | 3·6 |
| do 15 | do ..... | do ..... | 5110 | Mrs. Oakley..... | 4·0 | 4·2 |
| do 15 | do ..... | do ..... | 5111 | J. Roach ..... | 7·5 | 4·1 |
| do 29 | do ..... | do ..... | 5116 | M Sheehan..... | 2·9 | 3·7 |
| do 29 | do ..... | do ..... | 5117 | J. Gaynor..... | 3·1 | 3·4 |
| do 29 | do ..... | do ..... | 5118 | A. Charters..... | 3·3 | 3·1 |
| do 29 | do ..... | do ..... | 5119 | W. Arder..... | 3·3 | 4·2 |
| 1882. | | | | | | |
| March 20 | do ..... | do ..... | 5189 | J. Malone..... | 2·7 | 3·8 |
| do 20 | do ..... | do ..... | 5190 | Mrs. Robb..... | 2·5 | 2·5 |
| April 4 | do ..... | do ..... | 5195 | Patrick O'Donohue ..... | 3·0 | 3·5 |
| do 4 | do ..... | do ..... | 5196 | Allen Caskie ..... | 2·3 | 4·4 |
| do 14 | do ..... | do ..... | 5401 | J. Hughes..... | 2·9 | 3·0 |
| do 14 | do ..... | do ..... | 5402 | J. Jackson ..... | 3·0 | 3·9 |
| do 19 | do ..... | do ..... | 5405 | John Adams & Sons ..... | 3·6 | 3·4 |
| do 19 | do ..... | do ..... | 5406 | R. McGrath..... | 3·1 | 4·1 |
| do 25 | do ..... | do ..... | 5409 | J. Caskie..... | 2·5 | 4·4 |
| do 25 | do ..... | do ..... | 5410 | Toronto Dairy Co..... | 3·3 | 3·8 |
| do 28 | do ..... | do ..... | 5431 | J. Bousted..... | 2·7 | 4·4 |
| do 28 | do ..... | do ..... | 5432 | G. Heber ..... | 2·0 | 4·9 |
| May 4 | do ..... | do ..... | 5435 | J. W. Squire..... | 6·6 | 4·0 |
| do 4 | do ..... | do ..... | 5446 | Mrs. Orr..... | 1·0 | 3·9 |
| do 4 | do ..... | do ..... | 5447 | Mrs. Black..... | 1·3 | 4·7 |
| do 12 | do ..... | do ..... | 5451 | J Cooper..... | 2·3 | 4·7 |
| do 12 | do ..... | do ..... | 5452 | J. Endeau..... | 2·3 | 5·0 |
| do 12 | do ..... | do ..... | 5453 | C. Toplis..... | 2·7 | 5·3 |
| do 23 | do ..... | do ..... | 5457 | Mrs. Kane..... | 3·1 | 5·2 |
| do 23 | do ..... | do ..... | 5458 | J. Roach ..... | 2·9 | 5·0 |
| June 1 | do ..... | do ..... | 5478 | J. Ward..... | 3·3 | 5·1 |
| do 1 | do ..... | do ..... | 5479 | F. Sole..... | 2·8 | 5·6 |
| do 1 | do ..... | do ..... | 5480 | J. Phillips..... | 2·3 | 3·0 |
| do 29 | do ..... | do ..... | 5942 | J. Jackson..... | 2·7 | 5·2 |

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DRUGS—Tabulated Statement, &c.—*Continued.*

| Results of Analysis. | | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|
| Sugar and Salts. | Ash. | Total. | | Cream. | |
| | | Solids. | Water. | | |
| p. cent. | p. cent. | p. cent. | p. cent. | p. cent. | |
| 3·8 | 0·6 | 9·7 | 90·3 | 7·0 | Watered. |
| 4·1 | 0·7 | 12·4 | 87·6 | 8·0 | Unadulterated. |
| 3·8 | 0·6 | 10·6 | 89·4 | 8·0 | Watered. |
| 4·0 | 0·7 | 12·2 | 87·8 | 11·0 | Doubtful. |
| 4·9 | 0·7 | 11·3 | 88·7 | 9·5 | Watered. |
| 3·7 | 0·6 | 11·2 | 88·8 | 9 0 | do |
| 3·93 | 0·57 | 9·7 | 90·3 | 8·5 | do |
| 4·3 | 0·6 | 10·4 | 89·6 | 9·5 | do |
| 3·1 | 0·7 | 13·2 | 96·8 | 12·0 | Unadulterated. |
| 3·9 | 0·6 | 11·2 | 88·8 | 10·0 | Watered. |
| 3·64 | 0·56 | 10·0 | 90·0 | 10·0 | do |
| 4·9 | 0·7 | 12·1 | 87·9 | 8·0 | Unadulterated. |
| 3·9 | 0·7 | 11·6 | 88·4 | 10·0 | Doubtful. |
| 2·7 | 0·5 | 8·3 | 91·7 | 7 5 | Watered. |
| 4·7 | 0·7 | 12·6 | 87·4 | 12·0 | Unadulterated. |
| 4·8 | 0·7 | 12·3 | 87·7 | 10·0 | do |
| 3·6 | 0·6 | 9·6 | 90·4 | 7·5 | Watered. |
| 4·4 | 0·6 | 10·8 | 89·2 | 9 0 | do |
| 5·1 | 0·8 | 13·0 | 87·0 | 10·0 | Unadulterated. |
| 3·4 | 0·6 | 10·1 | 89·9 | 8·5 | Watered. |
| 5·1 | 0·7 | 13·8 | 86·2 | 13 0 | Unadulterated. |
| 5·0 | 0·8 | 13·5 | 86·5 | 10·0 | do |
| 4·5 | 0·7 | 12·5 | 87·5 | 10·0 | do |
| 3·5 | 0·6 | 10·1 | 89·9 | 8·0 | Watered. |
| 4·5 | 0·7 | 13·4 | 86·6 | 13·0 | Unadulterated. |
| 4·4 | 0·7 | 16·7 | 83·3 | 28·0 | Remarkably high fat. |
| 5·2 | 0·7 | 12·5 | 87·5 | 8·0 | Unadulterated. |
| 5·6 | 0·8 | 12·9 | 87·1 | 9·5 | do |
| 4·8 | 0·6 | 11·8 | 88·2 | 9·0 | Watered. |
| 4·5 | 0·7 | 12·7 | 87·3 | 8·5 | Unadulterated. |
| 4·3 | 0·7 | 12·5 | 87·5 | 10·0 | do |
| 4·3 | 0·6 | 9·9 | 90·1 | 10·0 | Watered. |
| 4·0 | 0·7 | 11·2 | 88·8 | 11·0 | do |
| 4·1 | 0·7 | 11·5 | 88 5 | 6·0 | Skimmed. |
| 3·7 | 0·7 | 11·3 | 88·7 | 8·0 | Watered. |
| 4·6 | 0·8 | 12·3 | 87·7 | 11·0 | Unadulterated. |
| 5·3 | 0·7 | 13·0 | 87·0 | 12·0 | do |
| 5·3 | 0·8 | 13·3 | 86·7 | 12·0 | do |
| 4·4 | 0·7 | 12·0 | 88·0 | 5·0 | do |
| 5·7 | 0·6 | 12·4 | 87·6 | 8·0 | do |
| 3·3 | 0·6 | 11·0 | 89·0 | 5·0 | Watered. |
| 2·8 | 0·6 | 10·3 | 89·7 | 6·0 | do |
| 2·5 | 0·5 | 13·6 | 88·4 | 28·0 | Cream. |
| 5·1 | 0·5 | 10·5 | 89·5 | 6·0 | Unadulterated. |
| 5·5 | 0·7 | 12·2 | 87·8 | ..... | do |
| 4·4 | 0·7 | 12·1 | 87·9 | 10·0 | do |
| 4·6 | 0·7 | 12·6 | 87·4 | 9·0 | do |
| 3·5 | 0·7 | 12·2 | 87·8 | 10·0 | do |
| 3·7 | 0·7 | 12·7 | 87·3 | 10·0 | do |
| 4·0 | 0·7 | 12·6 | 87·4 | 9·5 | do |
| 2·8 | 0·8 | 12·0 | 88·0 | 9·0 | do |
| 3·0 | 0·7 | 12·1 | 87·9 | 10·0 | do |
| 3·5 | 0·6 | 9·4 | 90·6 | 6·5 | Watered. |
| 3·0 | 0·6 | 11·5 | 88·5 | 10·5 | Unadulterated. |

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## APPENDIX C—INSPECTION OF FOOD AND

MILK—

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Butter Fat. | Caseine. |
|---|---|---|---|---|---|---|
| 1881. | | | | | p. cent. | p. cent. |
| Sept. 22... | J. B. Edwards ... | Montreal..... | 4435 | William Dunkin..... | 4·2 | 4·6 |
| do 22... | do ... | do ..... | 4436 | George Black ..... | 2·0 | 4·4 |
| do 22... | do ... | do ..... | 4437 | Pierre Dufresne..... | 3·3 | 4·0 |
| do 22... | do ... | do ..... | 4438 | Alphonse Piché..... | 2·1 | 4·6 |
| Oct. 8... | do ... | do ..... | 4460 | John Flint..... | 2·9 | 4·5 |
| do 8... | do ... | do ..... | 4461 | John Day..... | 4·3 | 4·6 |
| do 8... | do ... | do ..... | 4462 | John Bromner ..... | 4·8 | 5·1 |
| do 8... | do ... | do ..... | 4463 | Robert Taylor ..... | 2·5 | 5·1 |
| do 21... | do ... | do ..... | 4492 | J. Lauder..... | 3·3 | 4·1 |
| do 21... | do ... | do ..... | 4493 | C. Lévesque ..... | 3·9 | 4·3 |
| do 21... | do ... | do ..... | 4494 | E. Christian..... | 3·2 | 4·5 |
| do 21... | do ... | do ..... | 4495 | J B. Dufresne..... | 4·0 | 4·7 |
| Nov. 16... | do ... | do ..... | 5002 | P. Healey..... | 3·9 | 4·6 |
| do 16... | do ... | do ..... | 5003 | François Deguise..... | 2·0 | 4·7 |
| do 16... | do ... | do ..... | 5004 | W Cinnamon..... | 4·0 | 4·8 |
| do 16... | do ... | do ..... | 5005 | George McCann..... | 3·2 | 4·8 |
| do 30... | do ... | do ..... | 5022 | Thomas Coughly. ..... | 3·3 | 5·1 |
| do 30... | do ... | do ..... | 5023 | William Swift..... | 2·0 | 4·3 |
| do 30... | do ... | do ..... | 5024 | H. A. Brown..... | 3·5 | 5·1 |
| do 30... | do ... | do ..... | 5025 | Thomas O'Connor..... | 3·0 | 4·2 |
| Dec. 5... | do ... | do ..... | 5034 | Robert Taylor..... | 1·0 | 4·2 |
| do 5... | do ... | do ..... | 5035 | B. Norris ..... | 3·3 | 4·6 |
| do 5... | do ... | do ..... | 5036 | Thomas Gleason..... | 1·8 | 4·3 |
| do 5... | do ... | do ..... | 5037 | James Delaney..... | 3·3 | 5·0 |
| do 12... | do ... | do ..... | 5042 | John Doyle..... | 3·1 | 4·4 |
| do 12... | do ... | do ..... | 5043 | William Tolhurst ..... | 3·5 | 4·5 |
| do 12... | do ... | do ..... | 5044 | William Henderson ..... | 3·0 | 4·5 |
| do 12... | do ... | do ..... | 5045 | Z. Meunier..... | 1·5 | 4·0 |
| do 16... | do ... | do ..... | 5056 | Théophile Pourrin..... | 3·0 | 4.4 |
| do 16... | do ... | do ..... | 5057 | S. J. O'Neill..... | 1·5 | 4·0 |
| 1882. | | | | | | |
| March 31... | do ... | do ..... | 5097 | Charles Jollicœur ..... | 3·3 | 5·0 |
| do 31... | do ... | do ..... | 5098 | J. Petit..... | 2·0 | 5·4 |
| do 31... | do ... | do ..... | 5099 | Alex. Toupin..... | 1·1 | 5·6 |
| do 31... | do ... | do ..... | 5100 | James Lowe ..... | 3·0 | 4·6 |
| April 5... | do ... | do ..... | 5213 | John O'Neill..... | 2·0 | 5·2 |
| do 5... | do ... | do ..... | 5214 | Samuel Penniston..... | 1·6 | 5·0 |
| do 5... | do ... | do ..... | 5215 | W. Menard. ..... | 2·8 | 5·0 |
| do 5... | do ... | do ..... | 5216 | Alexander Tate..... | 1·6 | 5·0 |
| do 19... | do ... | do ..... | 5239 | Henry Lambert..... | 1·8 | 5·0 |
| do 19... | do ... | do ..... | 5240 | Hugh McDonald..... | 3·3 | 5·1 |
| do 19... | do ... | do ..... | 5241 | William Dixon..... | 3·1 | 4·8 |
| do 19... | do ... | do ..... | 5242 | James Dooley..... | 3·0 | 4·5 |
| May 13... | do ... | do ..... | 5267 | Alexander Tate..... | 3·3 | 4·6 |
| do 13... | do ... | do ..... | 5268 | Thomas Gleason ..... | 3.5 | 4·6 |
| do 13... | do ... | do ..... | 5269 | William Davis..... | 3·4 | 4·7 |
| do 13... | do ... | do ..... | 5270 | William Clayton..... | 2·5 | 4·0 |
| do 17... | do ... | do ..... | 5279 | Thomas Reed..... | 2·0 | 4·5 |
| do 17... | do ... | do ..... | 5280 | Robert Taylor..... | 3·3 | 4·5 |
| do 17... | do ... | do ..... | 5281 | Thomas Dougherty..... | 3·0 | 4·4 |
| do 17... | do ... | do ..... | 5282 | Luc Prud'homme ..... | 4·0 | 5·1 |
| June 1... | do ... | do ..... | 5815 | A. Duprat..... | 2·1 | 4·8 |

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DRUGS—Tabulated Statement, &c.—*Continued.*

*Continued.*

| Result of Analysis. | | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|
| Sugar and Salt. | Ash. | Total. | | Cream. | |
| | | Solids. | Water. | | |
| p. cent. | p. cent. | p. cent. | p. cent. | p. cent. | |
| 4·0 | 0·8 | 13·6 | 86·4 | 12·0 | Good milk. |
| 4·1 | 0·7 | 11·2 | 88·8 | 5·0 | Adulterated by removal of 50 p. c. of cream. |
| 4·1 | 0·7 | 12·1 | 81·9 | 10·0 | Genuine. |
| 6·1 | 0·8 | 13·6 | 86·4 | 5·0 | Adulterated by removal of cream and addition of salt. |
| 5·0 | 0·6 | 13·0 | 87·0 | 9·0 | Genuine. |
| 4·6 | 0·6 | 14·1 | 85·9 | 13·0 | Good milk. |
| 5·0 | 0·7 | 16·6 | 84·4 | 14·0 | do |
| 3·8 | 0·6 | 12·0 | 88·0 | 6·0 | Deficient in cream; adulteration doubtful. (This is a manipulated milk.) |
| 4·4 | 0·6 | 12·4 | 87·6 | 10·0 | Genuine. |
| 4·1 | 0·7 | 13·0 | 87·0 | 12·0 | Good milk. |
| 4·3 | 0·7 | 12·7 | 87·3 | 10·0 | do |
| 4·5 | 0·7 | 13·9 | 86·1 | 12·0 | Rich milk. |
| 4·4 | 0·7 | 13·6 | 86·4 | 11·0 | Good do |
| 4·1 | 0·7 | 11·5 | 88·5 | 6·0 | Deficient in cream; adulterated. |
| 4·4 | 0·8 | 14·0 | 86·0 | 12·0 | Rich milk. |
| 5·1 | 0·7 | 13·8 | 86·20 | 10·0 | Genuine. |
| 5·0 | 0·6 | 14·0 | 86·0 | 10·0 | do milk. |
| 5·0 | 0·5 | 11·8 | 88·2 | 6·0 | Poor milk; adulteration doubtful. |
| 5·0 | 0·6 | 14·2 | 85·8 | 11·0 | Good milk. |
| 4·3 | 0·7 | 12·2 | 87·8 | 9·0 | Fair do |
| 4·5 | 0·5 | 10·2 | 89·8 | 3·0 | Adulterated by removal of cream; excess of water and salt. |
| 4·8 | 0 6 | 13·3 | 86·7 | 10·0 | Good milk. |
| 4·5 | 0·5 | 11·1 | 88·9 | 5·0 | Adulterated by removal of cream and addition of water. |
| 5·1 | 0·7 | 14·1 | 85·9 | 10·0 | Genuine milk. |
| 4·5 | 0·6 | 12·6 | 87·4 | 9·0 | Fair do |
| 4·6 | 0·7 | 13·3 | 86·7 | 11·0 | Good do |
| 4·5 | 0·6 | 12·6 | 87·4 | 9·0 | Genuine do |
| 4·0 | 0·5 | 10·0 | 90·0 | 5·0 | Adulterated by removal of cream and addition of water. |
| 4·5 | 0·6 | 12·50 | 87·50 | 9·0 | Unadulterated. |
| 4·1 | 0·6 | 10·20 | 89·80 | 5·0 | Adulterated by removal of cream and addition of water. |
| 5·3 | 0·7 | 14·3 | 85·7 | 10·0 | Good milk. |
| 6·2 | 0·8 | 14·4 | 85·6 | 6·0 | Cream deficient; adulteration doubtful. |
| 6·5 | 0·8 | 14·0 | 86·0 | 3·0 | Adulterated by removal of cream. |
| 4·3 | 0·7 | 12·6 | 87·4 | 9·0 | Unadulterated, but poor milk. |
| 5·0 | 0·7 | 12·9 | 87·1 | 6·0 | Adulterated by removal of cream. |
| 4·8 | 0·7 | 12·1 | 87·9 | 5·0 | do do |
| 4·3 | 0.7 | 12·8 | 87·2 | 9·0 | Poor milk, but genuine. |
| 4·7 | 0·7 | 12·0 | 88·0 | 5·0 | Adulterated by removal of cream. |
| 4·6 | 0·6 | 12·0 | 88·0 | 5·0 | do do 50 p. c. of cream and coloured with annato. |
| 5·0 | 0·7 | 14·1 | 85·9 | 10·0 | Good milk. |
| 4·9 | 0·7 | 13·5 | 86·5 | 9·5 | Genuine milk. |
| 4·4 | 0·6 | 12·5 | 87·5 | 9·0 | do but poor milk. |
| 4·7 | 0·7 | 13·3 | 86·7 | 10·0 | do milk. |
| 5·3 | 0·7 | 14·1 | 85·9 | 11·0 | do |
| 4·7 | 0·7 | 13·5 | 86·5 | 10·0 | do |
| 4·4 | 0·6 | 11·5 | 88·5 | 6·5 | Poor milk; skimmed. |
| 4·4 | 0·6 | 11·5 | 88·5 | 6·0 | do adulteration doubtful; probably partially skimmed. |
| 4·8 | 0·7 | 13·3 | 86·7 | 11·0 | Genuine milk; good quality. |
| 4·9 | 0·7 | 13·0 | 87·0 | 10·0 | Fair quality. |
| 4·7 | 0·7 | 14·5 | 85·5 | 12·0 | Rich milk. |
| 4·4 | 0·7 | 12·0 | 88·0 | 6·5 | Deficient in cream; adulteration doubtful. |

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## APPENDIX C.—INSPECTION OF FOOD AND

MILK—

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Butter Fat. | Caseine. |
|---|---|---|---|---|---|---|
| 1882. | | | | | p. cent. | p. cent. |
| June 1... | J. B. Edwards ... | Montreal..... | 5816 | Xavier Allard ..... | 3·0 | 4·4 |
| do 1... | do ... | do ..... | 5817 | James Coyle..... | 3·8 | 5·2 |
| do 1... | do ... | do ..... | 5818 | W. Swift..... | 3·3 | 5·1 |
| April 3... | M. Fiset ..... | Quebec ..... | 4663 | Ph. Lefebvre ..... | 1·70 | 2·9 |
| do 3... | do ..... | do ..... | 4664 | — Simard ..... | 1·74 | 4·00 |
| do 6... | do ..... | do ..... | 4665 | Ed. Boily..... | 3·56 | 4·30 |
| do 6... | do ..... | do ..... | 4666 | G. Bussière..... | 3·08 | 4·82 |
| do 12... | do ..... | do ..... | 4676 | V. Julien ..... | 3·4 | 5·4 |
| do 12... | do ..... | do ..... | 4677 | P. Leblond..... | 3·6 | 5·36 |
| do 17... | do ..... | do ..... | 4683 | F. Rochon ..... | 3·02 | 6·20 |
| do 17... | do ..... | do ..... | 4684 | P. Boutin..... | 3·48 | 7·90 |
| do 26... | do ..... | do ..... | 4694 | J. Paquet..... | 3·30 | 4·42 |
| do 26... | do ..... | do ..... | 4695 | J. Beaulieu ..... | 0·20 | 5·64 |
| May 4... | do ..... | do ..... | 5503 | do ..... | 3·62 | 6·60 |
| do 4... | do ..... | do ..... | 5504 | Pierre Samson..... | 1·96 | 5.08 |
| do 10... | do ..... | do ..... | 5514 | J. Beaulieu..... | 0·76 | 6·90 |
| do 10... | do ..... | do ..... | 5515 | — Brindamour ..... | 2·10 | 6·56 |
| do 16... | do ..... | do ..... | 5523 | C. Labreque..... | 2·10 | 3·54 |
| do 16... | do ..... | do ..... | 5524 | F. X. Bédard..... | 1·90 | 5·46 |
| do 23... | do ..... | do ..... | 5536 | Pierre Bourget..... | 0·80 | 6·40 |
| do 23... | do ..... | do ..... | 5537 | Antoine Morin..... | 2·08 | 6·70 |
| do 30... | do ..... | do ..... | 5546 | Chas. Guay ..... | 0·60 | 3·70 |
| do 30... | do ..... | do ..... | 5547 | Louis Carrier..... | 0·40 | 5·80 |
| do 30... | do ..... | do ..... | 5548 | Jean Vezina..... | 1·56 | 5·00 |
| do 30... | do ..... | do ..... | 5549 | Cleophas Couture.. ..... | 1·70 | 5·00 |
| June 12... | do ..... | do ..... | 5570 | Jac. Beaulieu..... | 1·64 | 6·20 |
| do 12... | do ..... | do ..... | 5571 | Jos. Pouliot ..... | 3·24 | 3·20 |
| 1881. | | | | | | |
| Oct. 4... | R. G. Fraser..... | Halifax..... | 4·05 | Mrs. Walsh..... | 8·5 | 4·0. |
| do 4... | do ..... | do ..... | 4505 | Church of England Lunch Room ..... | 2·6 | 4·3 |
| do 4... | do ..... | do ..... | 4507 | Mrs. G. O'Brien..... | 2·2 | 5·2 |
| do 17... | do ..... | do ..... | 4518 | Joseph Groves..... | 4·6 | 5·4 |
| do 17... | do ..... | do ..... | 4519 | Mrs. Jackson ..... | 2·4 | 5·2 |
| do 17... | do ..... | do ..... | 4520 | Mrs. Henegar. ..... | 2·1 | 5·8 |
| Nov. 4... | do ..... | do ..... | 4524 | Mr. Chipman..... | 2·9 | 3·8 |
| do 4... | do ..... | do ..... | 4525 | Mr. Brunt ..... | 3·7 | 6·1 |
| do 4... | do ..... | do ..... | 4526 | Mrs. Hefran ..... | 2·6 | 4·4 |
| do 17... | do ..... | do ..... | 4536 | Mr. Innes..... | 2·7 | 5·6 |
| do 17... | do ..... | do ..... | 4537 | Mrs. J. Keefe..... | 2·8 | 4·3 |
| do 17... | do ..... | do ..... | 4538 | Mrs. E. Foley..... | 2·5 | 4·1 |
| Dec. 2... | do ..... | do ..... | 4552 | Mrs. Shannahan ..... | 4·6 | 3·8 |
| do 2... | do ..... | do ..... | 4553 | Mrs. W. Mountain..... | 3·6 | 2·6 |
| do 2... | do ..... | do ..... | 4554 | Mrs. J. Leahy ..... | 3·2 | 6·1 |
| do 17... | do ..... | do ..... | 4570 | Alex. Bond..... | 2·6 | 5·8 |
| do 17... | do ..... | do ..... | 4571 | Mrs. E. Weeks..... | 4·0 | 4·4 |
| do 17... | do ..... | do ..... | 4572 | Michael Murphy ..... | 3·6 | 4·8 |
| do 17... | do ..... | do ..... | 4576 | Mrs. Carroll ..... | 2·4 | 3·45 |
| do 17... | do ..... | do ..... | 4577 | Michael J. Clinton ..... | 1·7 | 2·9 |
| 1882. | | | | | | |
| May 16... | M. Bowman ..... | do ..... | 5314 | John Hogan..... | 3·37 | 4·49 |
| do 16... | do ..... | do ..... | 5315 | Hugh Brown..... | 2·75 | 3·78 |
| do 16... | do ..... | do ..... | 5316 | Mrs. Guxson..... | 2·80 | 3·41 |

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DRUGS—Tabulated Statement of, &c.—*Continued.*

*Continued.*

| Result of Analysis. | | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|
| Sugar and Salts. | Ash. | Total. | | Cream. | |
| | | Solids. | Water. | | |
| p. cent. | p. cent. | p. cent. | p. cent. | p. cent. | |
| 4·4 | 0·7 | 12·5 | 87·5 | 9·0 | Genuine. |
| 4·0 | 0·7 | 13·7 | 86·3 | 11·0 | do and rich milk. |
| 4·4 | 0·7 | 13·5 | 86·5 | 10·0 | Good milk. |
| 4·48 | 0·24 | 9·32 | 88·38 | 8·0 | Inferior. |
| 5·56 | 0.34 | 11·64 | 88·36 | 9·0 | do |
| 5·18 | 0·40 | 13·44 | 85·56 | 7·0 | Insufficiency of cream; not adulterated. |
| 4·60 | 0·38 | 12·88 | 87·12 | 12·0 | Good. |
| 5·0 | 0·40 | 14·2 | 85·8 | 9·0 | Pure. |
| 4·8 | 0·34 | 14·10 | 85·9 | 9·0 | Not adulterated. |
| 2·58 | 0·50 | 12·30 | 87·7 | 10·0 | Good. |
| 1·76 | 0·44 | 13·58 | 86·42 | 9·0 | do |
| 4·52 | 0·36 | 12·60 | 87·40 | 9·0 | do but deficient in cream. |
| 4·30 | 0·40 | 10·54 | 89·46 | 2·0 | Skimmed. |
| 2·93 | 0·60 | 13·80 | 86·20 | 12·0 | Very good. |
| 4·70 | 0·52 | 12·26 | 87·74 | 10·0 | Good. |
| 2·86 | 0·44 | 10·96 | 89·04 | 3·0 | Skimmed. |
| 3·04 | 0·40 | 12·10 | 87·90 | 10·0 | Pure. |
| 4·80 | 0·46 | 10·90 | 89·10 | 7·50 | Inferior. |
| 4·32 | 0·40 | 12·08 | 87·92 | 7·0 | Not adulterated. |
| 3·20 | 0·30 | 10·70 | 89·30 | 7·0 | Inferior. |
| 2·46 | 0·50 | 11·74 | 88·29 | 7·50 | Good. |
| 5·00 | 0·50 | 9·80 | 90·20 | 4·0 | Largely adulterated with water. |
| 3·60 | 0·60 | 10·40 | 89·60 | 3·0 | Skimmed. |
| 4·60 | 0·40 | 11·56 | 88·44 | 10·0 | Pure. |
| 3·90 | 0·40 | 11·00 | 89·00 | 7·0 | Inferior. |
| 4·06 | 0·60 | 12·40 | 87·60 | 4·0 | Doubtful; probably skimmed. |
| 6·36 | 0·40 | 13·20 | 86·80 | 12·0 | Pure. |
| 5·5 | 0·65 | 18·7 | 81·3 | 28·05 | Large excess of cream; not an average sample. |
| 5·8 | 0·7 | 13·4 | 86·6 | 8·58 | No adulteration. |
| 4·5 | 0·6 | 12·5 | 87·5 | 7·26 | Deficient in cream. |
| 5·0 | 0·65 | 15·65 | 84·35 | 15·18 | No adulteration. |
| 4·85 | 0·55 | 13·00 | 87·00 | 7·92 | do |
| 4·2 | 0·50 | 12·6 | 87·40 | 6·93 | Deficient in cream. |
| 4·9 | 0·6 | 12·2 | 87·8 | 9·57 | No adulteration. |
| 3·8 | 0·5 | 14·1 | 85·9 | 12·21 | do |
| 4·95 | 0·55 | 12·5 | 87·5 | 8·58 | do |
| 4·8 | 0·6 | 13·7 | 86·3 | 8·91 | do |
| 5·05 | 0·65 | 12·8 | 87·2 | 9·24 | do |
| 6·2 | 0·8 | 13·6 | 86·4 | 8·25 | Pure milk. |
| 4·2 | 0·6 | 13·2 | 86·8 | 15·18 | No adulteration. |
| 3·3 | 0·5 | 10·0 | 90·0 | 11·88 | Doubtful. |
| 3·8 | 0·6 | 13·7 | 86·3 | 10·56 | No adulteration. |
| 3·9 | 0·6 | 12·9 | 87·1 | 8·58 | do |
| 4·7 | 0·7 | 13·8 | 86·2 | 13·2 | do |
| 5·1 | 0·7 | 14·2 | 85·8 | 11·88 | do |
| 4·2 | 0·55 | 10·60 | 89·4 | 7·92 | Deficient in cream. |
| 3·0 | 0·5 | 8·1 | 91·9 | 5·61 | do adulteration doubtful. |
| 5·33 | 0·65 | 13·84 | 86·16 | 11·0 | Unadulterated. |
| 4·60 | 0·70 | 11·83 | 88·17 | 9·0 | do |
| 5·52 | 0·69 | 12·42 | 87·58 | 9·0 | do |

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## APPENDIX C—INSPECTION OF FOOD AND

MILK—

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Butter Fat. | Caseine. |
|---|---|---|---|---|---|---|
| 1882. | | | | | p. cent. | p. cent. |
| May 16... | M. Bowman..... | Halifax..... | 5317 | Church of England Institute... | 3·57 | 4·65 |
| do 16... | do ..... | do ..... | 5318 | Charles Craig ..... | 2·86 | 4·44 |
| do 16... | do ..... | do ..... | 5319 | Mrs. Mary Walsh..... | 3·61 | 2·79 |
| June 14... | do ..... | do ..... | 5334 | Dillon Bros..... | 3·02 | 3·52 |
| do 14... | do ..... | do ..... | 5335 | T. S. Lownds..... | 3·08 | 3·45 |
| do 14... | do ..... | do ..... | 5336 | Mrs Greening..... | 2·40 | 3 03 |
| 1881. | | | | | | |
| Sept. 17 | W. F. Best..... | St. John..... | 4806 | E. V. Hunt..... | 1·25 | 4·50 |
| do 17 | do ..... | do ..... | 4807 | King Bros..... | 3·60 | 4·40 |
| do 17 | do ..... | do ..... | 4808 | S. F. McLeod..... | 4·20 | 5·20 |
| Oct. 10 | do ..... | do ..... | 4840 | Mrs. Spillane..... | 2·0 | 4·0 |
| do 10 | do ..... | do ..... | 4841 | William Baxter..... | 2·50 | 5·10 |
| do 10 | do ..... | do ..... | 4842 | J. F. Murray..... | 2·50 | 4·0 |
| do 24 | do ..... | do ..... | 4880 | J. Cumming..... | 2·75 | 4·0 |
| do 24 | do ..... | do ..... | 4881 | Mrs. G. Williams..... | 2·0 | 5·0 |
| do 24 | do ..... | do ..... | 4882 | Mrs. Reinhart..... | 2·50 | 3·0 |
| do 24 | do ..... | do ..... | 4883 | James Duke..... | 2·50 | 4·50 |
| do 24 | do ..... | do ..... | 4884 | Mrs. Dudley..... | 3·25 | 3·50 |
| do 24 | do ..... | do ..... | 4885 | J. F. Withers..... | 4·0 | 3·75 |
| Dec. 1 | do ..... | do ..... | 4903 | Mrs. McCullough..... | 3·0 | 7·25 |
| do 1 | do ..... | do ..... | 4904 | Joseph Edgar..... | 5·0 | 4·50 |
| do 1 | do ..... | do ..... | 4905 | A. Appleby..... | 3·0 | 5·0 |
| do 10 | do ..... | do ..... | 4909 | John Sands..... | 3·0 | 7·0 |
| do 10 | do ..... | do ..... | 4910 | R. B. Gilmour..... | 2·50 | 4·25 |
| do 10 | do ..... | do ..... | 4911 | Miss Adams..... | 2·50 | 5·50 |
| do 16 | do ..... | do ..... | 4915 | R. McGinnis..... | 1·25 | 2·25 |
| do 16 | do ..... | do ..... | 4916 | King Bros..... | 3·50 | 4·50 |
| do 16 | do ..... | do ..... | 4917 | R. Ritchie..... | 2·50 | 4·0 |
| 1882. | | | | | | |
| March 21 | do ..... | do ..... | 4921 | Mrs. J. Howe..... | 2·50 | 2·0 |
| do 21 | do ..... | do ..... | 4922 | Mrs. Spencer..... | 2·50 | 2 75 |
| April 1 | do ..... | do ..... | 4951 | Mrs. McCullough..... | 3·0 | 3·75 |
| do 1 | do ..... | do ..... | 4952 | King Bros ..... | 2·25 | 5·75 |
| do 8 | do ..... | do ..... | 4953 | Levi Smith..... | 3·50 | 4·25 |
| do 8 | do ..... | do ..... | 4954 | Smith & Trites..... | 3·50 | 4·50 |
| do 14 | do ..... | do ..... | 4959 | Mrs. Abrams..... | 2·70 | 3··5 |
| do 14 | do ..... | do ..... | 4960 | Mrs. Kernay..... | 2·80 | 3·50 |
| do 25 | do ..... | do ..... | 4995 | J. Foster ..... | 1·75 | 3·25 |
| do 25 | do ..... | do ..... | 4996 | R. Ritchie ..... | 1·50 | 4·50 |
| May 9 | do ..... | do ..... | 5619 | Mrs. R. Wallace..... | 2·75 | 5·0 |
| do 9 | do ..... | do ..... | 5620 | J. D. McAvity ..... | 3·0 | 4·10 |
| do 13 | do ..... | do ..... | 5621 | Smith & Trites ..... | 2·40 | 7·80 |
| do 13 | do ..... | do ..... | 5622 | W. A. Magee..... | 1·80 | 7·40 |
| do 19 | do ..... | do ..... | 5625 | C. A. Clark..... | 1·50 | 2 75 |
| do 19 | do ..... | do ..... | 5626 | S. F. McLeod..... | 0·75 | 5·50 |
| do 23 | do ..... | do ..... | 5629 | E. V. Hunt ..... | 2·40 | 7·40 |
| do 23 | do ..... | do ..... | 5630 | I. K. Smith..... | 2·80 | 7·50 |
| do 25 | do ..... | do ..... | 5643 | William Baxter..... | 4·0 | 4·70 |
| do 25 | do ..... | do ..... | 5644 | M. Spillane ..... | 2·60 | 6·0 |

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DRUGS—Tabulated Statement, &c.—*Continued.*

*Concluded.*

| Results of Analysis. | | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|
| Sugar and Salts. | Ash. | Total. | | Cream. | |
| | | Solids. | Water. | | |
| 4·35 | 0·67 | 13·24 | 86·76 | 11·0 | Unadulterated. |
| 4·72 | 0·70 | 12·72 | 87·28 | 10·0 | do |
| 4·19 | 0·60 | 11·19 | 88·81 | 11·0 | do |
| 5·09 | 0·78 | 12·43 | 87·57 | 10·0 | Genuine. |
| 4·80 | 0·60 | 11·93 | 88·07 | 9·0 | Good milk. |
| 4·39 | 0·46 | 10·28 | 89·72 | 6·0 | Deficient in cream. |
| 4·60 | 0·55 | 10·90 | 89·10 | 7·60 | Deficient in cream. |
| 5·40 | 0·60 | 14·0 | 86·0 | 11·0 | Not adulterated; a fair quality of milk slightly above the average. |
| 4·80 | 0·60 | 14·80 | 85·20 | 10·0 | Not adulterated. |
| 4·40 | 0·50 | 10·90 | 89·10 | 6·0 | Deficient in cream. |
| 4·60 | 0·60 | 12·80 | 87·20 | 6·0 | Fair milk. |
| 4·30 | 0·70 | 11·60 | 88·40 | 6·30 | Deficient in cream. |
| 4·25 | 0·50 | 11·50 | 88·50 | 6·25 | Skimmed. |
| 4·50 | 0·75 | 12·25 | 87·75 | 6·75 | Doubtful—probably skimmed. |
| 3·25 | 0·50 | 9·25 | 90·75 | 7·00 | Watered. |
| 4·0 | 0·75 | 11·75 | 88·25 | 7·50 | Poor milk. |
| 5·25 | 0·75 | 15·75 | 84·25 | 16·25 | Rich milk probably unfairly sampled by pouring from the top of the can. |
| 3·50 | 0·50 | 11·75 | 88·25 | 12·50 | Rich milk probably not a fair sample. |
| 3·75 | 0·50 | 14·0 | 86·0 | 4·0 | Deficient. |
| 4·0 | 0·75 | 13·50 | 86·50 | 8·25 | Fair average milk |
| 4·50 | 0·50 | 12·50 | 87·50 | 3·75 | Deficient in cream. |
| 3·50 | 0·25 | 15·50 | 84·50 | 8·50 | Doubtful. |
| 6·0 | 0·50 | 12·75 | 87·25 | 8·0 | Just within the limits. Deficient in cream. |
| 3·75 | 0·75 | 11·75 | 88·25 | 4·75 | Skimmed. |
| 3·75 | 0·50 | 7·25 | 92·75 | 3·0 | About 20 p. c. of water has been added. |
| 4·25 | 0·75 | 12·25 | 87·75 | 10·25 | Good and rich milk. |
| 3·75 | 0·75 | 10·25 | 87·75 | 8·75 | Fair quality of milk. |
| 4·50 | 0·60 | 9·60 | 90·40 | 7·0 | Adulterated by addition of water. |
| 4·25 | 0·70 | 10·20 | 89·80 | 6·50 | do do |
| 4·0 | 0·75 | 11·50 | 88·50 | 9·0 | do by removal of cream. |
| 2·0 | 0·75 | 10·75 | 89·25 | 6·50 | Skimmed. |
| 4·0 | 0·65 | 12·40 | 87·60 | 15·75 | Not adulterated. |
| 3·50 | 0·60 | 12·10 | 87·90 | 16·0 | do |
| 4·55 | 0·75 | 11·25 | 88·75 | 7·75 | Deficient in cream. |
| 3·40 | 0·65 | 10·35 | 89·65 | 6·75 | do |
| 3·75 | 0·50 | 9·25 | 90·75 | 9·0 | do |
| 5·0 | 0·60 | 11·60 | 88·40 | 7·50 | do |
| 4·30 | 0·70 | 12·75 | 87·25 | 9·0 | Fair quality. |
| 5·25 | 0·75 | 13·10 | 86·90 | 9·10 | Good milk. |
| 2·20 | 0·60 | 13·0 | 87·0 | 10·0 | Fair. |
| 1·75 | 0·85 | 11·80 | 88·20 | 4·20 | Deficient in cream. |
| 5·25 | 0·70 | 10·20 | 89·80 | 4·50 | do and watered. |
| 4·0 | 0·65 | 10·90 | 89·10 | 3·10 | do Very poor. |
| 2·0 | 1·10 | 12·90 | 87·10 | 9·80 | Pure. |
| 1·75 | 0·75 | 12·80 | 87·20 | 9·10 | do |
| 4·50 | 0·40 | 13·60 | 86·40 | 11·0 | Fair. |
| 3·20 | 0·60 | 12·40 | 87·60 | 4·0 | Deficient in cream. |



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NUTMEG.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis, and Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1882. | | | | | |
| May 5... | J. Baker Edwards | Montreal.. | 5277 | L. LaPierre..... | Ash 5·6. Genuine. |
| do 5... | do ... | do ... | 5278 | Edward Renaud..... | Ash 5·9. do |
| 1881. | | | | | |
| Dec. 26... | R. G. Fraser..... | Halifax.... | 4589 | W. H. Schwartz & Son | No adulteration. |

PEPPER.

| | | | | | |
|---|---|---|---|---|---|
| 1881. | | | | | |
| Dec. 15... | W. H. Ellis..... | Toronto ... | 5183 | F. Sheriff..... | Adulterated with about 10 to 15 per cent. of flour. |
| do 15... | do ..... | do ... | 5184 | T. Lumbers..... | do do do |
| do 15... | do ..... | do ... | 5185 | E. Lawson..... | Pure. |
| do 15... | do ..... | do ... | 5186 | Fulton & Michie..... | Pure. |
| do 15... | do ..... | do ... | 5187 | H. Dunn..... | Adulterated with about 30 or 40 per cent. of wheat and peas, and about 5 per cent. of sand. |
| do 15... | do ..... | do ... | 5188 | J. Sloan..... | Pure. |
| 1882. | | | | | |
| May 10... | do ..... | do ... | 5491 | J. Lumbers..... | Contains from 10 to 15 per cent. of flour. |
| do 10... | do ..... | do ... | 5492 | J. Berwick..... | do 5 to 10 do |
| do 10... | do ..... | do ... | 5493 | C. Ruse ..... | Pure. |
| do 10... | do ..... | do ... | 5494 | J. S. Grant..... | do |
| 1881. | | | | | |
| Sept. 29... | J. Baker Edwards | Montreal.. | 4472 | P. Grace..... | Ash 4·5. Adulterated with mustard husks, Indian cornmeal, and other starches, and millings to the extent of 25 to 30 per cent. |



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| | | | | | | |
|---|---|---|---|---|---|---|
| do | 29... | do ... | do ... | 4473 | N. Renaud..... | Ash 4·0. Adulterated with starches and millings to the extent of about 40 per cent. |
| do | 29... | do ... | do ... | 4474 | Napoleon Collins..... | do 7·0. do about 10 per cent. of wheat flour. |
| do | 29... | do ... | do ... | 4475 | N. Grenier..... | do 8·0. do about 50 per cent. with flour, millings, and plaster of Paris. |
| Oct. | 6... | do ... | do ... | 4476 | A. Shannon..... | do 8·0. Traces of wheat flour, adulteration doubtful. |
| do | 6... | do ... | do ... | 4477 | T. Lamb..... | do 5·0. Adulterated with cereals and millings about 30 per cent. |
| | | | | | | |
| | 1882. | | | | | |
| May | 2... | do ... | do ... | 5243 | Jeans Lauds ..... | do 5·0. do about 40 per cent. with husks, Indian corn, and millings. |
| do | 2... | do ... | do ... | 5244 | do ..... | do 6·0. do fully 50 per cent. with Indian corn, pea meal, and millings. |
| do | 2... | do ... | do ... | 5245 | Magloire Gascon..... | do 7·0. do with Indian corn and millings about 20 per cent. |
| do | 2... | do ... | do ... | 5246 | do ..... | do 6·0. do with flour, cereal husks, and millings, about 40 per cent. |
| June | 7... | do ... | do ... | 5835 | A. Robitaille & Co..... | do 7·0. Genuine. |
| do | 7... | do ... | do ... | 5837 | J. Hutchison..... | do 6·5. do |
| April | 7... | M. Fiset..... | Quebec.... | 4673 | F. X. Grenier..... | Falsified by admixing starch and ground peas. |
| do | 17... | do ..... | do .... | 4685 | A. J. Turcotte ..... | Pure. |
| May | 6... | do ..... | do .... | 5513 | Blumhart & Rivein..... | Adulterated with a small quantity of starch. |
| do | 16... | do ..... | do .... | 5530 | Dubeau & Prevost..... | do ground peas and stalks. |
| do | 30... | do ..... | do .... | 5552 | H. Marchand..... | do a little starch. |
| | | | | | | |
| | 1881. | | | | | |
| Dec. | 24... | R. G. Fraser..... | Halifax.... | 4580 | W. H. Schwartz & Son | No adulteration. |
| do | 24... | do ..... | do .... | 4581 | do ... | Adulterated with a small quantity of starch. |
| do | 24... | do ..... | do .... | 4582 | do ... | No adulteration. |
| do | 24... | do ..... | do .... | 4583 | do ... | do |
| Sept. | 17... | W. F. Best..... | St. John... | 4814 | L. Nelson..... | Not adulterated. |
| do | 17... | do ..... | do ... | 4815 | J. A. Turner..... | do |
| Oct. | 10... | do ..... | do ... | 4829 | J. A. & A. W. Morrill. | do |
| do | 10... | do ..... | do ... | 4830 | A. Emery & Co..... | Contains 30 per cent. of meal. |
| Dec. | 1... | do ..... | do ... | 4892 | A. Cain..... | do about 10 per cent. of buckwheat meal; adulterated. |
| do | 1... | do ..... | do ... | 4893 | P. Chisholm..... | do from 15 to 20 per cent. of wheat flour; do |
| | | | | | | |
| | 1880. | | | | | |
| Mar. | 21... | do ..... | do ... | 4925 | W. Ganong..... | Adulterated with 15 per cent. of bran. |
| do | 21... | do ..... | do ... | 4926 | B. McCrossin ..... | do 30 to 35 per cent. of bran and flour. |
| April | 14... | do ..... | do ... | 4974 | John Foster..... | Contains a small percentage of buckwheat meal and husks, less than 15 per cent; adulterated. |
| do | 14... | do ..... | do ... | 4975 | Holland & Co..... | Adulterated with 20 to 25 per cent. of meal and corn husks. |
| do | 14... | do ..... | do ... | 4976 | Geo. Robertson.. | do 20 per cent. of wheat flour |
| do | 14... | do ..... | do ... | 4977 | John Devine..... | do 30 to 35 per cent. of wheat flour, buckwheat, &c. |





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## POTTED MEATS AND FISH.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Result of Analysis and Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1882. | | | | | |
| June 18... | W. H. Ellis..... | Toronto... | 5926 | J. W. Blair ..... | Beef; unadulterated. |
| do 18... | do ..... | do ... | 5927 | Mrs. Bilton ..... | Chicken; contains about ¼ of a grain of tin to the pound, and a considerably larger quantity of iron. |
| do 18... | do ..... | do ... | 5928 | J. Cleghorn..... | Corned beef; unadulterated. |
| do 18... | do ..... | lo ... | 5929 | W. Pettle..... ..... | do do |
| do 18... | do ..... | do ... | 5930 | Mrs. Clegg..... | Mackerel; unadulterated. |
| do 18... | do ..... | do ... | 5931 | R. S. Gallagher..... | Salmon do |
| do 18... | do ..... | do ... | 5932 | W. A. Smith ..... | Mackerel do |
| do 18... | do ..... | do ... | 5933 | J. Cleghorn ..... | do do |
| April 12... | J. B. Edwards ... | Montreal.. | 5287 | J. Robertson..... | Turkey; excellent and no metallic impurity. |
| do 12... | do ... | do ... | 5288 | do ..... | do do |
| do 12... | do ... | do ... | 5289 | Crawford & Gordon..... | Ham; old stock, but in edible condition. |
| do 12... | do ... | do ... | 529C | do ..... | Potted tongue; well pressed and in good condition. |
| May 10... | do ... | do ... | 5291 | A. Cusson..... | Lobster; fresh and good quality; no metallic impurity. |
| do 10... | do ... | do ... | 5292 | A. Robitaille & Co..... | Mackerel; contaminated from the package, with iron, tin and lead; not wholesome. |
| do 10... | do ... | do ... | 5293 | do ..... ..... | Salmon; fresh and wholesome fish; uncontaminated with metallic impurity. |
| do 10... | do ... | do ... | 5294 | D. Hutton ..... | Oysters; fresh and wholesome; free from metallic impurity. |
| June 20... | M. Bowman..... | Halifax.... | 5349 | C. & W. Anderson..... | Corned beef; meat of inferior quality; no metallic impurity. |
| May 9... | W. F. Best..... | St. John... | 5601 | C. Murray & Co..... | Sardines; somewhat stale and deteriorated by keeping; traces of metallic impurity, tin and lead. |
| do 9... | do ..... | do ... | 5602 | do ..... | Mutton; meat in good condition and free f om metallic impurity. |
| do 23... | do ..... | do ... | 5637 | Jardine & Co..... | Roast beef; in good condition; no trace of metallic impurity. |
| do 23... | do ..... | do ... | 5638 | George Robertson ..... | Lobster do do do |
| do 23... | do ..... | do ... | 5639 | Jardine & Co..... | do fresh; no trace of metallic impurity. |
| do 23... | do ..... | do ... | 5640 | George Robertson ..... | Salmon do in good condition; considerable loose solder in can. |



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| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Result of Analysis. | | | | Remarks by Analyst. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cane Sugar. | Glucose. | Moisture. | Ash. | |
| 1881. | | | | | p. cent. | p. cent. | p. cent. | p. cent. | |
| Dec. 21... | W. H. Ellis..... | Toronto ... | 5152 | F. McDonald ..... | 89·3 | 8·3 | 1·4 | 1·0 | |
| do 21... | do ..... | do ... | 5153 | W. & J. Dallimore ..... | 88·4 | 8·5 | 1·9 | 1·2 | |
| do 21... | do ..... | do ... | 5154 | J. McLean ..... | 93·7 | 5·2 | 0·8 | 0·3 | |
| do 21... | do ..... | do ... | 5155 | W. Martin ..... | ..... | ..... | ..... | ..... | Pure; contains only traces of glucose. |
| do 21... | do ..... | do ... | 5156 | W. Parkhill..... | ..... | ..... | ..... | ..... | do do |
| do 21... | do ..... | do ... | 5157 | Law & Phillips..... | 88·8 | 8·0 | 1·9 | 1·3 | |
| do 21... | do ..... | do ... | 5158 | W. Ross & Co..... | 91·8 | 6·0 | 1·1 | 1·1 | |
| do 21... | do ..... | do ... | 5159 | T. W. McMillan ..... | ..... | ..... | ..... | ..... | do do |
| do 21... | do ..... | do ... | 5160 | J. Berwick..... | ..... | ..... | ..... | ..... | do do |
| do 21... | do ..... | do ... | 5161 | Henry Lindsay..... | 97·9 | 1·5 | 0·4 | 0·2 | |
| 1882. | | | | | | | | | |
| May 29... | do ..... | do ... | 5483 | J. A. Sloan..... | 95·8 | 3·2 | 0·8 | 0·2 | |
| do 29... | do ..... | do ... | 5484 | Caldwell & Hodgins.... | 99·95 | ..... | 0 5 | ..... | Redpath Refinery. |
| June 8... | do ..... | do ... | 5485 | J. Lumbers..... | 93·50 | 4·0 | 2·3 | 0·2 | Halifax do |
| do 8... | do ..... | do ... | 5486 | Swan Bros..... | 99·90 | ..... | 1·0 | ..... | Redpath do |
| do 8... | do ..... | do ... | 5487 | W. A. Bradshaw ..... | 99·95 | ..... | 0·5 | ..... | |
| do 8... | do ..... | do ... | 5488 | J. W. Lang & Co ..... | 99·90 | ..... | 1·0 | ..... | Halifax. |
| do 8... | do ..... | do ... | 5489 | Central Co., Operative Store..... | 90·6 | 6·5 | 2·3 | 0·6 | Redpath. |
| do 8... | do ..... | do ... | 5490 | J. S. Earl..... | 93·2 | 4·4 | 2·1 | 0·3 | do |
| Jany. 28... | J. B. Edwards.... | Montreal .. | 5058 | Wm. Donahue ..... | 97·0 | Mere traces. | 3·0 | Under 1·0 | Halifax; excellent moist refined grade, over ·20. |
| do 28... | do ... | do ... | 5059 | do ..... | 88·0 | 5·50 | 6·0 | 0·50 | St. Lawrence Refinery; unadulterated. |
| do 28... | do .. | do ... | 5060 | do ..... | 86·8 | 6·0 | 7·0 | 0·2 | do granulated brown; unadulterated. |
| do 28... | do ... | do ... | 5061 | do ..... | 99·9 | ..... | 1·0 | ..... | do do white; nearly pure. |
| do 28... | do ... | do ... | 5062 | J. E. Mullin & Co..... | 87·5 | 7·50 | 4·80 | 0·20 | Canada Refinery; unadulterated |
| do 28... | do ... | do ... | 5063 | do ..... | 86·5 | 6·5 | 6·8 | 0·2 | do do |
| do 28... | do ... | do ... | 5064 | do ..... | 87·60 | 4·6 | 6·30 | 1·5 | do do |
| do 28... | do .. | do ... | 5065 | Tees, Costigan & Wilson | 88·0 | 4·50 | 6·0 | 1·5 | St. Lawrence Refinery do |
| do 28... | do ... | do ... | 5066 | do ... | 87·40 | 5·2 | 6·20 | 1·2 | do do |
| do 28... | do ... | do ... | 5067 | do ... | 95·0 | Only traces. | 4·5 | 0·5 | do do |



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## APPENDIX C—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

SUGAR—*Concluded.*

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis. | | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cane Sugar. | Glucose. | Moisture. | Ash. | Other impurities. | |
| 1882. | | | | | p. cent. | p. cent. | p. cent | p. cent. | p. cent. | |
| June 1... | J. B. Edwards. .. | Montreal.. | 5819 | Kirk, Lockerby & Co... | 85·0 | 4·5 | 6·0 | 4·0 | 4·5 | Canada Refinery; unadulterated. |
| do 1... | do ... | do ... | 5820 | Dufresne & Mongenais.. | 85·5 | 7·5 | 3·6 | ..... | 3·4 | St. Lawrence Refinery; unadulterated. |
| do 7... | do ... | do ... | 5821 | Tees. Costigan & Wilson. ..... | 85·8 | 7·2 | 3·4 | ..... | 3·6 | Imported sugar do |
| do 7... | do ... | do ... | 5822 | do ... | 85·4 | 6·0 | 3·6 | ..... | 5·0 | St. Lawrence Refinery do |
| do 7... | do ... | do ... | 5823 | do ... | 92·5 | 4·5 | 1·6 | ..... | 1·4 | Canada Refinery do |
| do 7... | do ... | do ... | 5824 | do ... | 83·0 | 12·0 | 1·4 | ..... | 3·6 | Imported sugar; unadulterated, but excess of glucose. |
| do 7... | do ... | do ... | 5825 | Tiffin & Co. ..... | 93·9 | 2·0 | 2·6 | ..... | 1·5 | St. Lawrence Refinery; unadulterated and of high quality. |
| do 7... | do ... | do ... | 5826 | Dufresne & Mongenais. | 93·5 | 2·5 | 2·4 | ..... | 1·6 | St. Berthier Beet Sugar Co.; unadulterated and of excellent quality. |
| May 23... | M. Fiset..... | Quebec .... | 5543 | Normand Chouinard.... | 99·95 | ..... | ..... | 0·05 | ..... | Granulated; pure. |
| do 23... | do ..... | do ... | 5544 | do ... | 96·78 | 3·0 | 0·10 | 0·12 | ..... | Pure. |
| do 23... | do ..... | do ... | 5545 | do ... | ..... | ..... | 15·00 | 0·60 | ..... | Maple sugar; pure. |
| June 12... | do ..... | do ... | 5574 | Blumhart & Riverin..... | 94·14 | 1·65 | 3·41 | 0·80 | ..... | Refined sugar do |
| do 12... | do ..... | do ... | 5575 | do ..... | 99·70 | ..... | 0·20 | 0·10 | . ..... | Granulated do |
| do 12... | do ..... | do ... | 5576 | do ..... | 90·31 | 5·00 | 4·25 | 0·44 | ..... | Porto Rico do |
| do 12... | do ..... | do ... | 5577 | do ..... | 95·05 | 2.50 | 1·55 | 0·90 | ..... | Demerara do |
| do 12... | do ..... | do ... | 5578 | do .. .. | 99·30 | ..... | 0·60 | 0·10 | . ..... | Loaf sugar do |
| 1881. | | | | | | | | | | |
| Dec. 8... | R. G. Fraser..... | Halifax .... | 4563 | Edward Donohoe..... | 87·40 | 3·75 | 6·00 | 2·85 | ..... | Refined sugar. |
| do 8... | do ..... | do ... | 4564 | do ..... | 88·70 | 4·20 | 5·1 | 2·00 | ..... | do |
| do 8... | do ..... | do ... | 4565 | Nicholas Meagher..... | 88·65 | 4·1 | 4·5 | 2·75 | ..... | do |
| do 10... | do ..... | do ... | 4566 | do ..... | 88·00 | 6·25 | 5·0 | 0·75 | ..... | do |
| do 10... | do ..... | do ... | 4567 | John Mullane..... | 92·90 | 2·75 | 3·5 | 0·85 | ..... | do |
| do 10... | do ..... | do ... | 4568 | do ..... | 94·25 | 2·3 | 2·8 | 0·65 | ..... | do |
| Sept. 17... | W. F. Best..... | St. John... | 4816 | Weldon Bros..... | 89·50 | 3·0 | 7·0 | 0·50 | ..... | Yellow refined; contains no acid or metallic impurities. |

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| do | 17... | do ..... | do ... | 4817 | G. T. Purves..... | 99·00 | Trace. | 0·80 | 0·20 | ..... | Granulated; contains no acid or metallic impurities. |
| do | 17... | do ..... | do ... | 4818 | L. Nelson..... | 92·00 | 6·50 | 1·00 | 0·50 | ..... | Light yellow; contains no acid or metallic impurities, contains a rather large per centage of glucose. |
| Oct. | 10... | do ..... | do ... | 4831 | W. A. Porter..... | 98·50 | Trace. | 1·50 | ..... | ..... | Granulated; pure cane sugar. |
| do | 10... | do ..... | do ... | 4832 | R. Carlton..... | 90·75 | 7·00 | 2·00 | ..... | 0.25 | Moist brown; unaduletrated. |
| do | 10... | do ..... | do ... | 4833 | Armstrong Bros..... | 99·50 | None. | 0·50 | ..... | ..... | Granulated; not adulterated. |
| Dec. | 1... | do ..... | do ... | 4896 | P. Chisholm..... | 92 00 | 5·50 | 1·00 | 0·50 | ..... | Refined; not adulterated. |
| do | 1... | do ..... | do ... | 4897 | A. Cain ..... | 93·00 | 5·50 | 1·00 | 0·50 | ..... | do do |
| do | 1... | do ..... | do ... | 4898 | M. & H. Gallagher..... | 89·50 | 4·50 | 5·75 | 0·25 | ..... | do do |
| 1882. | | | | | | | | | | | |
| Mar. | 21... | do ..... | do ... | 4927 | John Murray..... | 92·00 | 3·00 | 4·00 | 1·00 | ..... | Yellow refined do |
| do | 21... | do ..... | do ... | 4928 | William Murray..... | 98·00 | ..... | 1·75 | 0·25 | ..... | Granulated do |
| do | 21... | do ..... | do ... | 4929 | Alex. Porter ..... | 99·00 | 0·50 | 0·30 | 0·20 | ..... | Halifax refined do |
| do | 21... | do ..... | do ... | 4930 | A. C. McMurty..... | 93·25 | 1·25 | 3·75 | 1·75 | ..... | Canada refined do |
| May | 9... | do ..... | do ... | 5607 | A. G. Wills. ..... | 98·50 | 0·75 | 0·50 | 0·25 | ..... | Granulated do |
| do | 9... | do ..... | do ... | 5608 | Mrs. Thomas Marter.... | 90·75 | 3·50 | 5·25 | 0·50 | ..... | Refined do |

## SWEETS.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report | Vendor. | Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1881. | | | | | |
| Dec. 9... | W. H. Ellis..... | Toronto ..... | 5132 | E. J. Davis ..... | Cayenne lozenges; unadulterated. |
| do 9... | do ..... | do ..... | 5133 | G. Constable..... | Wintergreen berries do |
| do 9... | do ..... | do ..... | 5134 | E. Lawson ..... | Musk lozenges do |
| do 9... | do ..... | do ..... | 5135 | R. Gallagher..... | Cinnamon lozenges do |
| do 9... | do ..... | do ..... | 5136 | J. Martin ..... | Cocoanut do |
| do 9... | do ..... | do ..... | 5137 | M. Allen..... | Imitation date stones do |
| do 9... | do ..... | do ..... | 5138 | F. Reynolds..... | Wintergreen berries do |
| do 9... | do ..... | do ..... | 5139 | T. A. Wilkinson ..... | Strawberry candy do |
| do 9... | do ..... | do ..... | 5140 | G. S. McConkey. ..... | Aniseed berries; coloured with ferriginous pigment. |
| do 9... | do ..... | do ..... | 5141 | W. Eccleston ..... | do do do |



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SWEETS—*Continued.*

| | | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis and Remarks by the Analyst. |
|---|---|---|---|---|---|---|
| 1882. | | | | | | |
| June | 15 | W. H. Ellis | Toronto | 5916 | E. Lawson | Rose lozenges; unadulterated. |
| do | 15 | do | do | 5917 | R. & F. Watson | Pop corn do |
| do | 15 | do | do | 5918 | Mrs. McDonald | Tea berries do |
| do | 15 | do | do | 5919 | W. A. Smith | Wintergreen do |
| do | 15 | do | do | 5920 | H. G. Eccleston | Almond drops do |
| do | 15 | do | do | 5921 | T. McConkey | Wintergreen; adulterated with 7 per cent. of plaster of Paris. |
| do | 15 | do | do | 5922 | M. Allen | do unadulterated. |
| do | 15 | do | do | 5923 | W. M. Gear | Popcorn. do |
| do | 15 | do | do | 5924 | H. Webb | Coffee drops do |
| do | 15 | do | do | 5925 | T. Webb | Red sugar do |
| 1881. | | | | | | |
| Sept. | 15 | J. Baker Edwards | Montreal | 4431 | Mrs. Ann Loveridge | Unadulterated and wholesome. |
| do | 15 | do | do | 4432 | do | do |
| do | 15 | do | do | 4433 | John Flynn | do |
| do | 15 | do | do | 4434 | Z. Gravel | do |
| do | 22 | do | do | 4444 | George Black | Almond sweets. Unadulterated and wholesome. |
| do | 22 | do | do | 4445 | do | Mixed sweets do |
| do | 22 | do | do | 4446 | Pierre Dufresne | Mixed candy (coloured) do |
| do | 22 | do | do | 4447 | H. Harvey & Co | Mixed sweets do |
| do | 22 | do | do | 4448 | do | Lozenges do |
| do | 22 | do | do | 4449 | Betsey Wallace | Coloured stick candy. Chief colours wholesome, viz.: pink and brown. Yellow contains chrome in small quantity. Adulteration on the whole doubtful. |
| 1882. | | | | | | |
| May | 30 | do | do | 5805 | J. Cochenthaler | Coloured sugar sticks. Free from adulteration or metallic pigments. |
| do | 30 | do | do | 5806 | do | Peppermint lozenges. Good quality and flavour. No adulteration. |
| do | 30 | do | do | 5807 | do | Ginger lozenges. Free from adulteration. |
| do | 30 | do | do | 5808 | J. W. Tester | Acid drops. Deliquescent, and of inferior quality, but not unwholesome. |
| do | 30 | do | do | 5809 | do | Carraway comfits. Of good quality and wholesome colouring matter. |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| do | 30 | do | do | 5810 | do | Candy balls. Chiefly glucose covered with a shell of cane sugar. No mineral impurity. |
| June | 1 | do | do | 5831 | James Walker | Stamped sugars, flavoured. Chiefly glucose and boiled sugar. Nothing injurious to health. |
| do | 1 | do | do | 5832 | do | Pure sugar. |
| do | 1 | do | do | 5833 | do | Candy twists, coloured. Genuine sugar. Colouring matter wholesome. |
| do | 1 | do | do | 5834 | do | Gum drops. Glucose, gum and sugar. Vegetable colouring. Not injurious. |
| March | 29 | M. Fiset | Quebec | 4660 | A. Pare | do No injurious colouring matter. |
| April | 6 | do | do | 4670 | V. N. Minguy | do Pure. |
| do | 15 | do | do | 4681 | J. A. Hossack | Mixed candies do |
| do | 22 | do | do | 4693 | J. Allard | Mixed sweets do |
| do | 26 | do | do | 5501 | Et. Paradis | Sugar sticks. Unadulterated. |
| May | 4 | do | do | 5509 | Ed. Minguy | Mixed candies. Pure. |
| do | 10 | do | do | 5520 | Blumhart & Riverin | do do |
| do | 17 | do | do | 5529 | Dubeau & Prevost | do do |
| 1881. | | | | | | |
| Nov. | 5 | R. G. Fraser | Halifax | 4531 | Charles Anderson | Mixed confectionery of very good quality. No adulteration. |
| do | 5 | do | do | 4542 | do | Motto lozenges do do |
| do | 5 | do | do | 4533 | do | do containing a large quantity of starch, and adulterated with gypsum. |
| do | 5 | do | do | 4534 | do | Chocolate drops. No adulteration. |
| do | 5 | do | do | 4535 | do | Peppermint lozenges. Superior quality. No adulteration. |
| Sept. | 21 | W. F. Best | St. John | 4825 | George Smith | Mixed drops. Cane sugar with admixture of glucose, flavoured with lemon, wintergreen, &c. The pink, yellow and red colouring materials are all such as can be employed with safety to health. |
| do | 21 | do | do | 4826 | J. O. Miller | Scotch mixtures. Contain nothing which will injure the health. No mineral colours used. |
| Oct. | 19 | do | do | 4858 | F. Downing | Mixtures. Some yellow and red drops contain traces of objectionable lead pigments. Remaining drops and lozenges harmless. |
| do | 19 | do | do | 4859 | J. O. Miller | Scotch mixtures. Nearly all the samples contain a large quantity of glucose and flour. Absence of mineral pigments. |
| do | 19 | do | do | 4860 | Jardine & Co | Mixtures. Absence of injurious colours. Glucose and flour used in all the samples. |
| Dec. | 1 | do | do | 4894 | John Gibbs | Sugar sticks. The materials used are pure and harmless. Not adulterated. |
| do | 1 | do | do | 4895 | M. & H. Gallagher | Mixed drops. Contain no foreign mineral colouring matter. Not adulterated. |
| 1882. | | | | | | |
| April | 14 | do | do | 4967 | George Robertson | do No metallic colouring matter used. Sugar used, largely glucose. |
| do | 14 | do | do | 4968 | Jardine & Co | do No injurious colours used. Sugar largely glucose. Several pieces contain plaster of Paris. |



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SWEETS—*Concluded.*

| Date, | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis and Remarks by the Analyst. |
|---|---|---|---|---|---|
| 1881. | | | | | |
| April 14 | W. F. Best | St. John | 4969 | M. Miller | Scotch mixtures. No colours used that can prove injurious. About 30 p.c. glucose, in small pieces. |
| do 14 | do | do | 4970 | Woodburn & Co | Mixtures. No injurious colours used. As much as 30 to 35 p.c. glucose, in small pieces. |
| May 9 | do | do | 4999 | Logan, Lindsay & Co | Mixed drops. Colours entirely harmless. Glucose present to the extent of 40 p.c. |
| do 9 | do | do | 5000 | Puddington & Merritt | do Colours all harmless. |

TEA.

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Extract | Ash. | Thein | — | |
| 1882. | | | | | p. cent. | p. cent. | p. cent. | p. cent. | |
| Dec. 15... | W. H. Ellis | Toronto | 5142 | Great Dominion Tea Co | 39·8 | 6·4 | 2·2 | | Green tea, faced; no foreign leaves. |
| do 15... | do | do | 5143 | Liquor Tea Co | 43·4 | 6·0 | 2·4 | | Hyson do do |
| do 15... | do | do | 5144 | Central Co-operative Store | 43·4 | 6·1 | 2·2 | | Green tea do do |
| do 15... | do | do | 5145 | M. McMillan | 45·2 | 6·0 | 2·0 | | do do do |
| do 15... | do | do | 5146 | E Lawson | 37·6 | 5·9 | 1·9 | | Black tea do |
| do 15... | do | do | 5147 | H. Dunn | 38·0 | 6·1 | 2·5 | | Green tea do do |
| do 15... | do | do | 5148 | G Giles | 39·0 | 5·9 | 2 6 | | do do do |
| do 15... | do | do | 5149 | W. Radcliffe | 45·3 | 6·1 | 2·3 | | do do do |
| do 15... | do | do | 5150 | T. Clark & Co | 37·2 | 6·0 | 2·2 | | Black tea do |
| do 15... | do | do | 5151 | Liquor Tea Co | 40·2 | 5·9 | 1·9 | | Young Hyson, faced do |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1882. | | | | | | | | | | | |
| May | 19... | do | ..... | do | ..... | 5436 | James Lant ..... | 41·2 | 6·5 | 1·95 | ..... | do do do |
| do | 19... | do | ..... | do | ..... | 5437 | Liquor Tea Co..... | 39·4 | 6·1 | 1·30 | ..... | do do do |
| do | 19... | do | ..... | do | ..... | 5438 | Central Co-operative Store..... ..... | 37·9 | 5·5 | 2·25 | ..... | Uncolored Japan, unfaced; no foreign leaves. |
| do | 19... | do | ..... | do | ..... | 5439 | Dominion Tea Co..... | 38·6 | 6·2 | 1·85 | ..... | Young Hyson, faced do |
| do | 19... | do | ..... | do | ..... | 5440 | Liquor Tea Co..... | 31·0 | 6·5 | 2·25 | ..... | Choice Black, unfaced do |
| do | 19... | do | ..... | do | ..... | 5441 | W. Robertson.. ..... | 45·8 | 6·2 | 2·35 | ..... | Young Hyson, faced do |
| do | 19... | do | ..... | do | ..... | 5442 | The Tea Co... ..... | 38·5 | 6·0 | 2·30 | ..... | do do do |
| do | 19... | do | ..... | do | ..... | 5443 | W. Grant ..... | 35·0 | 6·5 | 2·45 | ..... | Gunpowder do do |
| do | 19... | do | ..... | do | ..... | 5444 | R. N. Sheppard .. ..... | 37·4 | 6·6 | 1·75 | ..... | Young Hyson do do |
| do | 19... | do | ..... | do | ..... | 5445 | Liquor Tea Co..... | 41·3 | 6·5 | 1·85 | ..... | do do do |
| 1881. | | | | | | | | | | | | |
| Sept. | 15... | J. B. Edwards ... | | Montreal .... | | 4450 | A. Robitaille & Co..... | ..... | 7·0 | ..... | ..... | Imperial; adulterated with foreign and old leaves and with tea facing of gypsum and Prussian blue. |
| do | 15... | do | ... | do | ..... | 4451 | do ..... | ..... | 7·6 | ..... | ..... | Twankey; adulterated with foreign and old tea leaves and with tea facing containing Prussian blue. |
| do | 15... | do | ... | do | ..... | 4452 | R. Ouimet ..... | ..... | ..... | ..... | ..... | Gunpowder tea; genuine, but adulterated with tea facing. |
| do | 15... | do | ... | do | ..... | 4453 | B. Gravel..... | ..... | 4·3 | ..... | ..... | Imperial; genuine. |
| do | 2?... | do | ... | do | ..... | 4454 | Bigaouette & Frère..... | ..... | 6·8 | ..... | ..... | Japan do |
| do | 22... | do | ... | do | ..... | 4455 | M. Delahanty..... ... | ..... | 8·2 | ..... | ..... | Adulterated with foreign leaves and tea facings. |
| do | 22... | do | ... | do | ..... | 4456 | T. Scanlan.. ..... | ..... | 8·6 | ..... | ..... | Black do do do |
| do | 22... | do | ... | do | ..... | 4457 | Daniel Kerrins..... | ..... | 9·5 | ..... | ..... | Adulterated with foreign leaves and tea facings. |
| do | 29... | do | ... | do | ..... | 4458 | P. Grace..... | ..... | 8·0 | ..... | ..... | Genuine tea. |
| do | 29... | do | ... | do | ..... | 4459 | do ..... ..... | ..... | 7·5 | ..... | ..... | do |
| 1882. | | | | | | | | | | Leaves. | | |
| April | 21... | do | ... | do | ..... | 5225 | James Lowe ..... | 26·0 | 7·0 | traces. | 74·0 | Black tea; very poor, broken, dyed and adulterated with foreign leaves. |
| do | 21... | do | ... | do | ..... | 5226 | do ..... | ..... | 8·4 | ..... | ..... | Gunpowder; highly faced with gypsum, Prussian blue and ochre, and containing foreign leaves; adulterated. |
| do | 24... | do | ... | do | ..... | 5227 | Toussaint Decarie..... | 3·1 | 7·70 | ..... | ..... | Adulterated with exhausted leaves and tea facings. |
| do | 24... | do | ... | do | ... .. | 5228 | J. Forget..... ..... | 1·4 | 6·0 | ..... | ..... | Adulterated with stalks and foreign leaves. |
| do | 24... | do | ... | do | ..... | 5229 | L. N. Piche..... ..... | 5·1 | 7·5 | ..... | ..... | Black Congou; low quality, but not adulterated. |
| do | 24... | do | ... | do | ..... | 5230 | Joseph Cusson... ..... | 3·1 | 6·0 | ..... | ..... | Imperial; adulterated with foreign leaves and faced with gypsum. |
| do | 24... | do | ... | do | ..... | 5231 | Nicholas Kearns..... | 30·0 | 6·0 | ..... | ..... | Unadulterated. |
| do | 24... | do | ... | do | ..... | 5232 | M. A. Hood..... ..... | 22·0 | 6·0 | ..... | ..... | Low quality, but not adulterated. |
| do | 24... | do | ... | do | ..... | 5233 | M. P. Laverty..... ..... | 30·0 | 6·5 | ..... | ..... | Poor tea, but unadulterated. |
| do | 24... | do | ... | do | ..... | 5234 | do ..... | 23·0 | 6·0 | ..... | ..... | Japan tea, faced to resemble Hyson; good tea; no adulteration. |



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## APPENDIX C—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

TEA—*Concluded.*

| Date. | Name of Analyst. | Division. | No. of Analyst's Report. | Vendor. | Results of Analysis. | | | | Remarks by the Analyst. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Extract. | Ash. | Theine. | Leaves. | |
| 1882. | | | | | p. cent. | p. cent. | p. cent | p. cent. | |
| April 19 | M. Fiset | Quebec | 4688 | J. B. Rousseau | 32·20 | 7·50 | 1·70 | ..... | Adulterated with foreign leaves. |
| do 19 | do | do | 4689 | do | 25·75 | 7·14 | 1·80 | ..... | Green tea; pure. |
| May 16 | do | do | 5532 | Dubeau & Prevost | 35·80 | 5·75 | 1·95 | ..... | Pure. |
| do 16 | do | do | 5533 | do | 33·10 | 6·25 | 1·00 | ..... | do |
| do 16 | do | do | 5534 | — Crepeault | 29·40 | 7·50 | 0·90 | ..... | Weak; leaves broken. |
| do 16 | do | do | 5535 | Dubeau & Prevost | 37·10 | 7·50 | 2·70 | ..... | Pure. |
| do 30 | do | do | 5558 | Charles McKibbon | 20·62 | 5·87 | 0·50 | ..... | Weak; broken leaves. |
| do 30 | do | do | 5559 | do | 26·55 | 6·00 | 0·92 | ..... | Weak. |
| do 30 | do | do | 5560 | H. Marchand | 29·12 | 7·50 | 2·00 | ..... | Pure. |
| do 30 | do | do | 5561 | William Ruel | 26·12 | 6·50 | 1·80 | ..... | do |
| 1881. | | | | | | | | Leaves. | |
| Dec. 27 | R. G. Fraser | Halifax | 4591 | W. H. Schwartz & Son | 29·8 | 6·0 | ..... | 70·2 | Black tea; of inferior quality, containing a large proportion of stalk; no adulteration. |
| do 27 | do | do | 4592 | do | 30·0 | 6·3 | ..... | 70·0 | Black tea; no adulteration. |
| do 27 | do | do | 4593 | Edward Donahue | 26·1 | 5·9 | ..... | 73·9 | Black tea of good quality. |
| do 27 | do | do | 4594 | do | 25·0 | 6·24 | ..... | 75·0 | do contains a few faded leaves; no adulteration. |
| do 27 | do | do | 4595 | Nicholas Meagher | 30·3 | 5·4 | ..... | 69·7 | Black tea; contains a few green leaves; no adulteration. |
| do 27 | do | do | 4596 | do | 27·4 | 6·3 | ..... | 72·0 | Black tea; no adulteration. |
| do 27 | do | do | 4597 | John Mullane | 27·5 | 5·5 | ..... | 72·5 | do leaves very much broken; no adulteration. |
| do 27 | do | do | 4598 | do | 32·9 | 5·9 | ..... | 67·1 | Black tea of good quality; no adulteration. |
| 1882. | | | | | | | | | |
| April 28 | Mayn'd Bowman. | do | 5302 | T. Hemsworth | 26·40 | 5·3 | 1·0 | ..... | Unadulterated. |
| do 28 | do | do | 5303 | James Scott | 29·40 | 5·9 | 1·5 | ..... | do |
| do 28 | do | do | 5304 | E. O. Donahoe | 25·20 | 5·10 | 1·0 | ..... | do |
| do 28 | do | do | 5305 | do | 26·50 | 5·00 | 0·90 | ..... | do |
| May 18 | do | do | 5320 | R. M. McDonald | 28·95 | 5·00 | 1·20 | ..... | do |
| do 18 | do | do | 5321 | Payzant & King | 25·20 | 5·93 | 1·30 | ..... | do |

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| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| do | 18 | do | ... | do | ..... | 5322 | A. & W. Smith..... | 30·35 | 5·60 | 0·86 | ..... | Adulterated with foreign leaves. |
| do | 18 | do | ... | do | ..... | 5323 | C. Graham..... | 28·70 | 5·23 | 1·20 | ..... | Unadulterated. |
| 1881. | | | | | | | | | | | | |
| Sept. | 17 | W. F. Best | ..... | St. John | ..... | 4812 | G. T. Purves..... | 17·50 | 0·40 | 11·0 | ..... | Contains a large proportion (30 to 40 p.c.) of decayed and foreign leaves and stalks. |
| do | 17 | do | ..... | do | ..... | 4813 | J. A. Turner..... | 20·50 | 11·0 | 1·25 | ..... | Contains 25 p.c of leaves of elder and willow, with 10 p.c. of tea stalks. |
| Oct. | 10 | do | ..... | do | ..... | 4827 | R. Carleton..... | 19·00 | 7·50 | traces. | ..... | Genuine Japan tea, but of low quality and containing a few foreign leaves. |
| do | 10 | do | ..... | do | ..... | 4828 | A. Emery & Co..... | 28·50 | 4·50 | 1·75 | ..... | Black tea; pure and unadulterated. |
| do | 19 | do | ..... | do | ..... | 4867 | R. B. Gilmour & Co.... | 30·75 | 7·00 | 2·00 | ..... | do slightly faced with gypsum; contains also a few foreign leaves. |
| do | 19 | do | ..... | do | ..... | 4868 | King Bros..... | 28·50 | 6·00 | 1·25 | ..... | Tea of low grade, contains 15 p.c. of foreign leaves. |
| do | 19 | do | ..... | do | ..... | 4869 | William Martin . ..... | 22·00 | 0·75 | 6·50 | ..... | Black tea; free from foreign leaves, but of low quality. |
| do | 19 | do | ..... | do | ..... | 4870 | J. M. Hastings..... | 29·50 | 1·75 | 4·50 | ..... | Black tea of good quality. |
| Dec. | 1 | do | ..... | do | ..... | 4899 | A. Cain ..... | 27·50 | 6·50 | 1·50 | ..... | do not adulterated, but of low quality. |
| do | 1 | do | ..... | do | ..... | 4900 | M. & H. Gallagher..... | 22·00 | 4·50 | 1·00 | ..... | do do do |
| do | 1 | do | ..... | do | ..... | 4901 | P. Chisholm..... | 20·50 | 8·50 | 0·50 | ..... | do containing 25 p.c. of broken foreign leaves and stalks. |
| do | 1 | do | ..... | do | ..... | 4902 | J. A. Turner..... | 26·25 | 4·50 | 1·50 | ..... | Black tea of fair quality. |
| 1882. | | | | | | | | | | | | |
| March | 21 | do | ..... | do | ..... | 4935 | Wm. Murray..... | 28·50 | 4·50 | 1·75 | ..... | do of inferior quality, containing foreign leaves. |
| do | 21 | do | ..... | do | ..... | 4936 | John Murray..... | 25·00 | 6·75 | 0·75 | ..... | Black tea of low grade, adulterated with foreign leaves and stalks. |
| do | 21 | do | ..... | do | ..... | 4937 | Alex. Porter..... ..... | 26·50 | 6·25 | 2·75 | ..... | Black tea; no foreign leaves; not adulterated. |
| do | 21 | do | ..... | do | ..... | 4938 | B. McCrossin..... | 25·25 | 5·50 | 0·75 | ..... | do not adulterated; inferior quality. |
| April | 14 | do | ..... | do | ..... | 4980 | James Moulson..... | ..... | ..... | ..... | ..... | Genuine black tea; no foreign leaves; not adulterated. |
| do | 14 | do | ..... | do | ..... | 4981 | George Robertson..... | ..... | ..... | ..... | ..... | do do do |
| do | 14 | do | ..... | do | ..... | 4982 | R. Ritchie..... ..... | ..... | ..... | ..... | ..... | Genuine black tea; no foreign leaves; nothing added or taken away; not adulterated. |
| do | 14 | do | ..... | do | ..... | 4983 | D. N. Vanwart..... | ..... | ..... | ..... | ..... | Genuine black tea; contains from 15 to 20 p.c. of foreign leaves, probably 4 p.c. of tannin has been added. |
| May | 9 | do | ..... | do | ..... | 5609 | R. B. Gilmour & Co.... | 36·75 | 7·0 | 3·75 | ..... | Black tea; unadulterated. |
| do | 9 | do | ..... | do | ..... | 5610 | A. G. Wills..... | 38·00 | 5·0 | 2·25 | ..... | do do |



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# APPENDIX D.

## INSPECTION OF FOOD AND DRUGS.

TORONTO, 7th November, 1881.

SIR,—In accordance with instructions received from Mr. Stratton, the Collector of Inland Revenue for Toronto, I have made a series of analyses of the water supplied to the City of Toronto.

The samples were taken from Hanlan's Point, from both inside and outside the crib, which is the present source of supply, from the well on the engine-house wharf, from the pumping well, and from the tap in the School of Science.

In order to furnish standards for comparison, samples were also taken for analysis from the Lake and from the Bay at the foot of Yonge street.

As the result of a number of analyses extending over the month of October, I submit the following table as the average composition of the water in question:—

All constituents are expressed in grains per gallon of 70,000 grains.

| Description of Sample. | Free Ammonia. | Albumenoid Ammonia. | Chlorine in Chlorides. | Solids. | Hardness. |
|---|---|---|---|---|---|
| Lake | ·001 | ·008 | ·20 | 9·5 | 6·5 |
| Hanlan's Point | ·002 | ·01 | ·21 | 9·5 | 6·5 |
| Inlet Crib | ·003 | ·01 | ·21 | 9·5 | 6·5 |
| Wharf Well | ·004 | ·01 | ·21 | 9·5 | 6·5 |
| Pumping Well | ·004 | ·01 | ·21 | 9·5 | 6·5 |
| Tap | ·003 | ·01 | ·21 | 9·5 | 6·5 |
| Bay | ·020 | ·015 | ·34 | 9·5 | 6·5 |

It appears from the above table that the water as supplied to the city has practically the same composition as that of the Inlet Crib, and except for a trifling increase in the free ammonia is identical with that at Hanlan's Point. There is a still further increase in the free ammonia in the water of the Pumping Well. The cause of this increase, I am not prepared to explain. Further observations are required to show whether it is a temporary and more or less accidental phenomenon or not.

The full analysis of the water as supplied to the consumers is as follows:—

| | | |
|---|---|---|
| Colour | Pale yellow. | |
| Smell at 100° F | Somewhat peaty. | |
| Chlorine in Chlorides | ·21 grains | per gallon. |
| Nitrogen in Nitrates | ·015 | do |
| Ammonia | ·003 | do |
| Albumenoid Ammonia | ·010 | do |
| Oxygen absorbed in 15 minutes | ·0075 | do |
| do 4 hours | ·014 | do |
| Hardness before boiling (Clark's scale) | 6·5° | |
| do after do | 2·0° | |
| Total solid matter dried at 220° F | 9·5 | do |

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This may be taken as the average composition of the Toronto water supply during the month of October last, and except that the albumenoid ammonia is very high it is taken by itself satisfactory.

In certain conditions of the wind, however, the water is not so good. Thus on the 17th, with a strong east wind blowing, the water was quite turbid.

On comparing the composition of the public water supply with that of the Lake on the one hand, and that of the Bay on the other, it appears that the city water while approaching much more closely to the former than to the latter occupies, nevertheless, an intermediate position between them.

These considerations render it evident that the necessity of abandoning the present source of supply at the earliest possible moment cann be too strongly insisted on.

I have the honor to be, Sir,
Your obedient servant,

W. H. ELLIS,
*Public Analyst.*

The Commissioner of Inland Revenue.

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## REPORT ON THE CORNWALL WATERS.

4th February, 1882.

SIR,—I have the honor to report that on the 17th December last, I received from the Collector at Cornwall, four additional samples of water, making the total number of samples 22. The results of my analysis I have already handed in upon the usual certificates, the method of analysis employed and the valuations of results being in accordance with the British method recently adopted by English Public Analysts, and published in *The Analyst*.

As a summary of these results may be useful, I beg to explain that, in the standard adopted, *Pure Distilled Water* is taken as the standard of absolute purity and ranks 0; any water which on the 12 special counts for impurity does not exceed 15 points on the scale laid down, is reckoned as "water of exceptional purity."

Water ranking above 15 and under 40, 1st class.
do 40 do 65, 2nd class.
do 65 do 90, 3rd class.
do 100 condemned as unfit for use.

On this basis of valuation I find waters of

| | |
|---|---|
| exceptional purity | 2 (Nos. 11 & 21.) |
| Water of 1st class | 1 (No. 5.) |
| do 2nd class | 4 (Nos. 4, 13, 17 & 22.) |
| do 3rd class | 2 (Nos. 16 & 19.) |
| Waters condemned as unfit for use | 13 |
| Total | 22 |

Nos. 1, 2, 3, 6, 7, 8, 9, 10, 12, 14, 15, 18 & 20.
The latter waters are all contaminated with sewage as well as soil drainage.

I have the honor to be, Sir,
Your obedient servant,

J. BAKER EDWARDS, PH.D., F.C.S.

To the Commissioner of Inland Revenue.

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## APPENDIX D—INSPECTION OF FOOD AND DRUGS—Tabulated Statement, &c.—*Continued.*

### WATER.

| Date. | No. of Analyst's Report. | Vendor. | Colour. | Odour. | Chlorine. | Phosphates. | Nitrates, &c. | Ammonia. | Albumenoid. | Oxygen at 80° 15 M. | Hardness, by Clark. | Solids in Solution. | Solids in Suspension. | Microscopical Examinations. | Rank of Impurity. | Total Solids per Imperial Gallon. | Class of Potable Water. | Results of Analyis and Remarks by Analyst. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1882. | | | | | | | | | | | | | | | | Grs. | | |
| Jan. 3 | 5068 | N. of 2nd St., A. H... | 2· | 4 | 19 | 4 | 10 | 70 | 20 | 10 | 2 | 21 | 1 | 6 | 169 | 77·2 | Condem'd | Contaminated with surface water and sewage, and unfit for human consumption. |
| do 3 | 5069 | S. do O. H... | 2· | 4 | 31 | 4 | 10 | 50 | 20 | 40 | 1 | 56 | 4 | 4 | 226 | 161·5 | do ... | do do do |
| do 3 | 5070 | S. of 1st St., C. H.... | 2· | 4 | 17 | 4 | 6 | 40 | 25 | 20 | 1 | 47 | 2 | 6 | 174 | 111·0 | do ... | do do do |
| do 3 | 5071 | D. Carpenter.-..... | 1· | ... | 15 | ... | 6 | 2 | 5 | 2 | 3 | 33 | 2 | 4 | 73 | 108·5 | 2nd Class. | Potable water of 2nd Class, approaching 3rd Class quality. |
| do 3 | 5072 | D. McRae..... | ... | ... | 4 | ... | ... | 1 | 2 | 2 | 6 | 6 | 4 | ..... | 25 | 31·5 | 1st do .. | Wholesome water, 1st Class. |
| do 3 | 5073 | D. McDonell..... | 2· | 1 | 19 | 4 | 6 | 5 | 10 | 5 | 19 | 26 | 6 | 6 | 109 | 73·5 | Condem'd | Contaminated with sewage and unfit for domestic use. |
| do 3 | 5074 | Plomondin..... | 2· | 4 | 19 | 4 | 10 | 50 | 14 | 10 | 12 | 22 | 6· | 10 | 163 | 81·5 | do ... | do do do |
| do 3 | 5075 | Danao..... | 4· | 4 | 25 | 4 | 10 | 40 | 10 | 40 | 12 | 34 | 6· | 6· | 195 | 114 5 | do ... | do do do |
| do 3 | 5076 | J. Kilgour..... | 4· | 2 | 29 | 4 | 10 | 5 | 5 | 10 | 8 | 19 | 6 | 4 | 106 | 73·5 | do ... | do do do |
| do 7 | 5077 | N. Hurteau..... ..... | 4· | 4 | 33 | 8 | 12 | 20 | 40 | 40 | 8 | 42 | 6 | 10 | 227 | 129·5 | do ... | do do do |
| do 7 | 5078 | Raceway..... | ... | ... | 2 | ... | ... | ... | .. | 4 | 2 | 3 | ... | ..... | 11 | 14· | A 1..... | Wholesome water of exceptional purity. |
| do 7 | 5079 | C. Wood..... ..... | 2 | 2 | 20 | 4 | 10 | 40 | 20 | 20 | 7 | 19 | 4 | 4 | 152 | 79·5 | Condem'd | Contaminated with sewage and unfit for human consumption. |
| do 7 | 5080 | La Clere..... ..... .. | 1 | ... | 2 | ... | 4 | 15 | 10 | 10 | 4 | 8 | 2 | 2 | 58 | 38·5 | 2nd Class. | Contaminated with surface drainage, but not with sewage. |
| do 10 | 5081 | D. G. McDonell..... | 1 | 2 | 12 | 4 | 8 | 12 | 10 | 4 | 6 | 11 | 4 | 4 | 78 | 52·5 | Condem'd | do sewage and unfit for use. |
| do 12 | 5082 | Dunkin ..... | 1 | 2 | 20 | 4 | 8 | 10 | 8 | 10 | 5 | 16 | 4 | 4 | 92 | 66·5 | do ... | do do do |
| do 12 | 5083 | Phelan..... | 1 | 4 | 6 | ... | 6 | 10 | 9 | 10 | 6 | 10 | 2 | 2 | 66 | 49· | 3rd Class.. | Contains no sewage and is a potable water of the 3rd Class. |
| do 12 | 5084 | Blondin..... | 1 | ... | 6 | ... | 2 | 4 | 2 | 10 | 8 | 12 | 1 | 1 | 47 | 56· | 2nd do . | Potable water of the 2nd Class. |
| do 12 | 5085 | Eastman..... | 2 | 4 | 25 | 4 | 10 | 10 | 12 | 12 | 6 | 20 | 3 | 4 | 112 | 87·5 | Condem'd | Contaminated with sewage and unfit for human consumption. |
| do 13 | 5086 | J. T. Kirkpatrick..... | 2 | ... | 10 | ... | 6 | 6 | 4 | 8 | 8 | 18 | 2 | 2 | 66 | 70 | 3rd Class. | Contaminated with surface drainage, but not with sewage; water of the 3rd Class. |
| do 13 | 5087 | Dr. Bergin..... ..... | 2 | 2 | 10 | 1 | 6 | 8 | 6 | 10 | 12 | 29 | 2 | 2 | 90 | 98 | do ... | Contaminated with surface drainage and a slight trace of sewage. On the latter ground, I should condemn it, although the rank of impurity is only bad 3rd Class. |
| do 13 | 5088 | River St. Lawrence, opposite Cornwall. | 1 | ... | 2 | ... | ... | ... | 1 | 2 | 1 | 4 | ... | 1 | 12 | 17·5 | A 1..... | Water of excellent quality and of exceptional purity on the British scale. |
| do 13 | 5089 | O. Gillespie..... | 2 | 1 | 4 | ... | ... | 2 | 4 | 8 | 8 | 10 | 1 | 1 | 41 | 42· | 2nd Class. | Potable water of 2nd Class. |

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## RESUMÉ ON WATER ANALYSIS: NEW METHODS AND RECENT RESULTS.

By J. Baker Edwards, Ph.D., F.C.S., Public Analyst, Montreal.

Considering the many discrepancies of water analysis, the Society of Public Analysts of Great Britain have done good service to social science by co-operating with Mr. G. W. Wigner, one of the Secretaries, and one of the editors of its organ, "The Analyst," in discussing during the present year:—

1. The Methods of Water Analysis.
2. Mode of Statement of Results.
3. Their Comparative Valuation.

Moreover, by the publication of monthly analyses of the "Public Water Supplies of Great Britain," they have conferred a benefit on the public. Mr. Wigner has long been a laborious "Water Analyst," and from his great experience on "Sea Side Waters," his opinion is entitled to considerable weight. As a result of his labors a Committee has been appointed by the Society of Public Analysts, which has drawn up and published a code of "Instructions for Water Analysis," in order to enable analysts generally to co-operate, by adopting an uniform method of analysis, and of the mode in which results shall be stated. It has still under consideration the mode of valuation of the relative impurities in potable waters submitted to the Society by Mr. Wigner in June last, which has subsequently been very generally approved. Comparative results having been thus rendered possible, a large number of English chemists have accepted the task of monthly water analysis in various districts, and these have been grouped together by Mr. Wigner in the recent September and October numbers of "The Analyst," showing the average values of the impurities from January to June of the present year, and the valuations for July, August and September, severally, of 65 different water supplies in Great Britain, representing an enormous amount of exact and laborious work, which is much enhanced in value by this mode of bringing into comparative review differences which, without *uniformity of method, statement, and of valuation*, would have no scientific interest whatever. Although the methods of research are *numerous* and *critical*, the Analysts of the Continent will, I feel sure, welcome anything like agreement on so vexed a question as water analysis, and will welcome these tabulated results, even if subsequent experience should lead to slight modifications of either *the methods or the valuations*.

Having lately had occasion to analyse for the Department of Public Works several samples of Ottawa water, I have carefully followed these methods and valuations, and I find much satisfaction in being thus enabled to classify them with British results so recently published, and from my own experience recommend to brother analysts in Canada and the United States the adoption of this general method, so that future tabulations of comparative values may include the whole of the waters of this Continent.

The following statement of results in the case of the Ottawa water supply will indicate the general method of analysis and mode of treatment. For details the reader is referred to the elaborate "Code of Instructions" published in the June, July and August numbers of "The Analyst," and also subsequently published in pamphlet form by the Society of Public Analysts.

*Result of analysis of Ottawa water supply, taken Sept. 7th, 1831, by Messrs. Keefer, Lesage and Arnold.*

| | |
|---|---|
| 1. Color in 2 feet column | light yellow |
| 2. Odor at 100 F.° | slightly peaty. |
| *3. Chlorine as Chlorides | ·4 |

*Quantities expressed in grains for Imperial gallon of 70,000 grs.



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| | | |
|---|---|---|
| 4. | Phosphoric acid | none. |
| 5. | Nitrates and nitrites | none. |
| 6. | Ammonia free | ·0050 |
| 7. | Albumenoid Ammonia | ·0010 |
| 8. | Oxygen absorbed at 80 F. in 15 minutes | ·0040 |
| 9. | Hardness by Clarke's test | 3·5° |
| * 10. | Solids in solution | 4·8 |
| † 11. | Solids in suspension | 4·2 |
| ‡ 12. | Microcosms | chiefly vegetable. |

The first mode of calculating the valuation of results is by fixing values to each of these impurities. Pure distilled water is taken as the standard of absolute purity —not taken for granted but ascertained by experiment. Variations from purity are assessed according to the following plan:—

| | | | |
|---|---|---|---|
| 1. | Appearance, blue clear 0; pale brown 1; pale yellow and green 2; dark yellow and dark green 4. | | |
| 2. | Suspended matters, traces 1; heavy traces 2; turbidity 4. | | |
| 3. | For odor, vegetable 1—2; animal 4. | | |
| 4. | Chlorine ·5 gr. per gallon 1. | | |
| 5. | Phosphoric acid, traces 2; heavy traces 4 to 8. | | |
| 6. | Nitrogen as Nitrates, &c | ·100 gr. per gal. | = 1 |
| 7. | Ammonia | ·005 " | = 1 |
| 8. | Albumenoid | ·001 " | = 1 |
| 9. | Oxygen absorbed in 15 minutes | ·002 " | = 1 |
| 10. | " " in 4 hours | ·010 " | = 1 |
| 11. | Hardness before and after boiling | ·5° | = 1 |
| 12. | Total solid matter 5 grs. per gal. 1 | | |
| 13. | Heavy metals, traces | | = 6 |
| | " " heavy traces | | = 12 |
| 14. | Vegetable debris | | = 4 to 8 |
| 15. | Diatoms and Bacteria | | = 6 to 12 |
| 16. | Hairs and animal debris | | = 10 to 20 |

This scale of valuation allows a considerable latitude for the exercise of judgment on the part of the analyst and of allowance for exceptional cases. On this scale 10 is assumed to be the maximum for any one of those impurities, and if any single impurity exceeds 10 the excess is doubled and included in the addition. The classification of waters as more or less pure, after such valuation, is more difficult to agree upon, and will not be accepted without considerable discussion and probably some difference of opinion. Still the valuation of the results already obtained are of the utmost value, and will be increased by the continued publication of monthly returns to the year's end.

At present Mr. Wigner recommended the following grouping of waters:—

Waters showing 15 or under are of exceptional purity.
" above 15 and under 40..... 1st class.
" " 40 " 65..... 2nd class.
" " 65 " 90 ..... 3rd class.
" " 100.....condemned as unfit for use.

---

* Containing Alkaline Silicates.

† Chiefly Siliceous fragments.

‡ Chiefly Diatoms and Sponge spicules and Algæ.

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Taking now the results obtained from the analysis of the Ottawa water, I value as follows:—

| | |
|---|---|
| 1. Color | 1·0 |
| 2. Odor | ·5 |
| 3. Chlorine | 1·0 |
| 4. Phosphates | none |
| 5. Nitrates | none |
| 6. Ammonia | ·5 |
| 7. Albumenoid | 1·0 |
| 8. Oxygen absorbed | 2 0 |
| 9. Hardness | 1·0 |
| 10. Solids in solution | 1·0 |
| 11. Solids in suspension | 1·0 |
| 12. Microcosms | 1·0 |
| | 10·0 |

This water, therefore, stands very high on the British scale of purity. Some other examples of Ottawa water ranged as high as 12 for impurity, but 11 may be taken as the mean value.

Now, by the publication of these monthly returns based upon the same methods. I am enabled to give a comparative view of a series of English water supplies examined in the same month of September last. Thus—all exceptionally pure:—

| | |
|---|---|
| Rochdale valuation | = 9 |
| Warwick | = 10 |
| Canterbury | = 12 |
| Swansea and Wolverhampton | = 15 |

First class:

| | |
|---|---|
| Bolton | = 17 |
| Shrewsburry | = 19 |
| Brighton and Salford | = 21 |
| Exeter and Leicester | = 23 |
| Bury and Edinboro' | = 24 |
| Portsmouth | = 27 |
| Plymouth | = 28 |
| Birmingham | = 29 |
| Bristol and Whitehaven | = 30 |
| London supplies | 21 to 39 |

Second class:

| | |
|---|---|
| Rugby | = 46 |
| Liverpool | = 47 |
| Darlington | = 50 |
| Newcastle-on-Tyne | = 68 |
| Kings and Lynn | = 110 (condemned) |

Ottawa supply 10 to 12.

It would thus appear that Ottawa water ranks very high in purity as compared with the average water supplies of Great Britain even after filtration, and that, while this mode of additional precaution is open to the private consumer, and of the most serious importance in the prevention of disease, it is an open question as to how this can be best conducted in this country so as to be of general advantage, and it appears to me that (considering the exigencies in case of fire, the variability of climate, the severity of winter, and other considerations incidental to this country), for the water impurities, present filtration is the only remedy, and household filtration the only

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practical remedy. I have, therefore, to recommend a plan of general household filtration which should be generally adopted and made compulsory on all water companies, in which water should be filtered from the main supply into houses or tenements or streets, and that taxes should be imposed for the use of filters as for the use of gas meters, added to the consumer's account on a *pro rata* basis. This project, I think, would prove effectual, and I hope may be found practical, and thus remove one of the many public grievances from the municipal shoulders of the corporate bodies of Canada.

On referring to the water analyses which I reported on the Montreal supply in 1879, and applying to these results the table of valuation, I find that notwithstanding the including of matters in suspension, Montreal water stands high by comparison. Thus:

| | | | |
|---|---|---|---|
| March 1st, | standard of impurity | ..... | 11·5 |
| April 21st | " " | ..... | 16 5 |
| July 30th | " " | ..... | 15·5 |

Montreal water would, therefore, be exceptionally pure under such a system of filtration as I have suggested. That this is not utopian is, I think, proved by the fact that several modes of filtration have been patented which have considerable merit, and one or other of which might be adapted to larger or smaller rates of filtration with satisfactory results.

That a simple flannel bag or felt filter is capable of removing a large quantity of the most objectionable kind of floating animal and vegetable matter is shown by the quantity removed in the flannel bag now exhibited, which has been in use for two days only over the supply pipe of the Parliament buildings at Ottawa, and which has removed upwards of four oz. of debris, river mud and vegetable matter, more than a score of snails, besides water beetles, worms and other not very minute animals. This is, of course, a very partial filtration, but it is simple and within the reach of all. The models of filters on a large scale capable of effectually filtering very large supplies, are as follows:—

No. 1. Howell's Patent—filters by capillary attraction through hempen cloths; it is built in sections, so that it can be easily taken asunder and cleansed. As a water-filter animal charcoal is placed between the sections, and such a filter would only require a cleansing once a year or so.

No. 2. Foley's Patent, is manufactured by Robert Mitchell & Co. of this city. It contains sand and animal charcoal and is exceedingly effective. Under the ordinary pressure it filters the whole water supply of a house or public building, and is easily cleansed by reversing the currents of water, without disturbing the packing.

No. 3. Crocket's Patent, is designed for large quantities, such as district supplies, or " Station Filters." It is also cleansed by reversing the supply, and is an effective filter, applicable to public purposes and large volumes of water.

These designs show that there exist no insuperable difficulties in the filtration of water on the large scale in Canada; and such filtration would remove one-half of the solid matter, and therefore would render the water supply twice as pure as it is at present.

MONTREAL, November, 1881.

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